\*\*\*\*\*

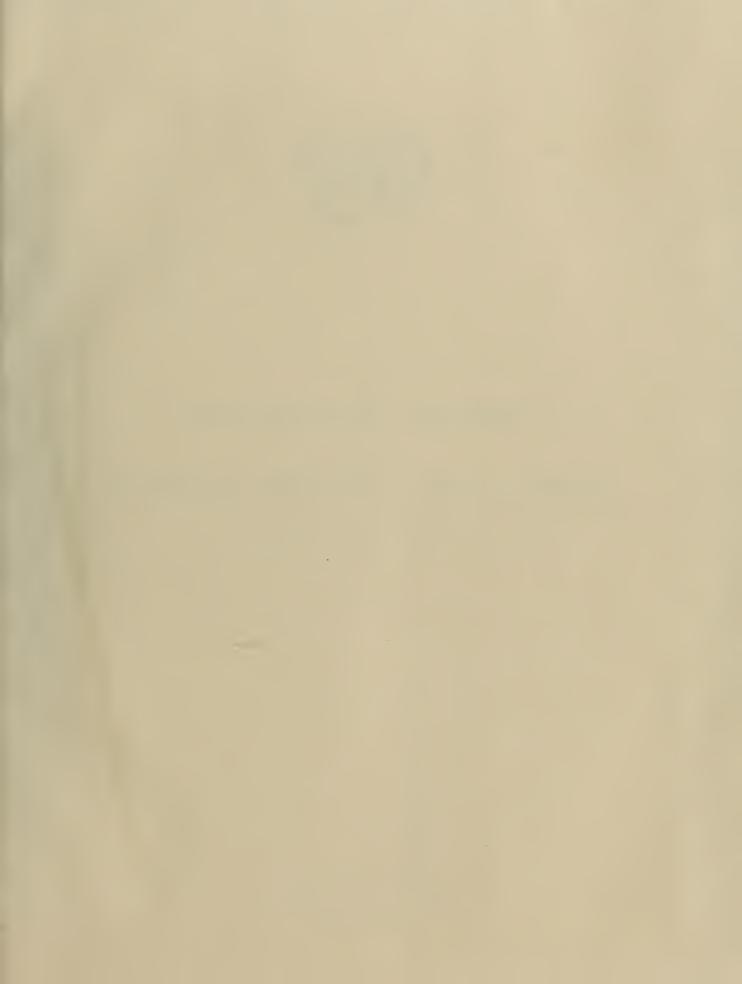
Please handle this volume with care.

The University of Connecticut Libraries, Storrs

\*\*\*\*\*

hbl, stx Preliminary report on the world so 3 9153 00712917 6

HN/17/.5/U45/1952









# PRELIMINARY REPORT on the WORLD SOCIAL SITUATION

With special reference to standards of living

UNITED NATIONS

Department of Social Affairs

New York, 1952

E/CN.5/267/Rev.1 8 September 1952

UNITED NATIONS PUBLICATIONS

Sales No.: 1952.IV.11

Price: \$1.75 (U.S.) (or equivalent in other currencies)

# TABLE OF CONTENTS

| Chapte | <del>*</del>  | Page   |
|--------|---|--|
|        | Preface   | 1  |
| I.     | Introduction  | 3  |
| II.    | BACKGROUND FACTS ON WORLD POPULATION AND POPULATION TRENDS  |  |
|        | Introduction Birth rates Mortality Infant mortality Expectation of life Age composition of the population Current population trends   | 5<br>6<br>10<br>13<br>15<br>17<br>18         |
| III.   | HEALTH CONDITIONS   |  |
|        | Introduction The relevance and irrelevance of health statistics Mass diseases The control of mass diseases The development of health services Fiscal problems The wider consequences of health programmes                 | 22<br>24<br>24<br>28<br>32<br>33<br>35       |
| IV.    | Food and nutrition  | 37   |
|        | Production Trade Consumption and nutrition Food needs in relation to increasing population Problems of increasing food supplies Social problems of improving nutritional levels Conclusion Appendices: Statistical tables | 37<br>39<br>41<br>44<br>44<br>46<br>46<br>46 |
| V.     | Housing   |  |
|        | Introduction Housing conditions in the more industrialized countries Housing conditions in less-developed areas Conclusion  | 53<br>53<br>58<br>59                         |
| VI.    | Education   |  |
|        | Introduction National levels of education Post-primary education Distribution of schooling: inequalities within countries Language of instruction Fundamental and adult education Communication facilities Appendix       | 60<br>60<br>67<br>70<br>76<br>78<br>80<br>86 |

| Chapter | f , , , , , , , , , , , , , , , , , , ,  | Page   |
|---------|--|--|
| VII.    | Conditions of work and employment  |  |
|         | Introduction Conditions of work and employment in agriculture Industrial labour Conditions of migrant workers Employment of women and of children Mobility of labour Social security and the worker Worker-employer relations Conclusion | 99<br>100<br>104<br>110<br>111<br>114<br>115<br>115                |
| VIII.   | Some special circumstances affecting standards of living   |  |
|         | Introduction Lack of means of livelihood Some special problems of children Problems of physical handicap Problems of old age Refugees and displaced persons Conclusion   | 120<br>120<br>121<br>123<br>126<br>127<br>128                      |
| IX.     | GENERAL LEVELS OF INCOME AND WELFARE   |  |
|         | Introduction  National income per capita  Distribution of income within countries  Relation of income statistics to various social statistics  | 129<br>129<br>132<br>134   |
| - X.    | Social conditions in Latin America   |  |
|         | Introduction Population and land Social stratification and the general standard of living Housing Nutrition Health and sanitation Education and literacy Problems of security Lack of communications and transportation Conclusion       | 136<br>138<br>140<br>142<br>142<br>143<br>144<br>145<br>146<br>147 |
| XI.     | Social conditions in the Middle East   |  |
|         | Introduction The Middle Eastern nomad The Middle Eastern village The Middle Eastern town General problems of manpower and employment General problems of health and sanitation Nutrition Social security and welfare Conclusion          | 148<br>149<br>151<br>156<br>159<br>160<br>161<br>161<br>162        |
| XII.    | Social conditions in South and Southeast Asia  |  |
|         | Introduction Population trends Health Levels of consumption Housing Education Income and employment Security and destitution   | 164<br>166<br>167<br>168<br>169<br>170<br>171<br>178               |

# EXPLANATION OF SYMBOLS

| Data not available              |   |
|---------------------------------|---|
| Magnitude nil (or negligible)   |   |
| Provisional or estimated figure | * |



## **PREFACE**

In May 1949, the General Assembly of the United Nations, following a proposal by the delegation of Lebanon, adopted the following resolution:

"The General Assembly,

"Considering that the Economic and Social Council has been entrusted by the Charter with the responsibility of helping to solve international problems in the economic, social, humanitarian and cultural fields,

"Considering that solutions to these problems can best be achieved through exhaustive studies in the corresponding fields,

"Considering that the Council has already initiated, in the economic field, a series of general studies on the world economic situation which has been of the greatest practical use to it in carrying out its work,

"Invites the Economic and Social Council to consider, on the basis of a report by its Social Commission and after consultation with the specialized agencies and the non-governmental organizations concerned, the possibility of drafting a general report on the world social and cultural situation."

The question was debated at some length in the Economic and Social Council and in the Social Commission. Nearly all members agreed it would be desirable to have a report on the world social and cultural situation, but many had misgivings as to whether such a report would be feasible, in view of the vastness and complexity of the subject. The Council asked the Secretary-General to make an inquiry into the views of the specialized agencies concerned and of non-governmental organizations with consultative status.

The results of the inquiry were submitted in 1950 to the sixth session of the Social Commission and the eleventh session of the Economic and Social Council. The Secretary-General concluded on the basis of the inquiry that the project would be feasible if it were limited in conception and scope to information already available to the United Nations and the specialized agencies and collected in documents prepared in the course of official duties; if it concentrated upon quantitative indices where available; if it were confined to "universally recognized needs and problems", and did not attempt analysis of factors reflecting differences in beliefs and values; and if it emphasized actual conditions rather than measures taken with regard to these conditions.

The Social Commission agreed with this conclusion, eliminated the word "cultural" from the title and recommended the project to the Economic and Social Council. The Council requested the Secretary-General:

"... to submit to the eighth session of the Social Commission and to the fifteenth session of the Council a report on the world social situation along the lines of the memorandum of the Secretary-General, based on the information at the disposal of the United Nations and its specialized agencies and in accordance with the recommendations contained in the resolution on this subject adopted by the Social Commission at its sixth session."

The preliminary report that follows has been prepared in accordance with this request.

Its limitations should be clearly stated.

First, it is not based on new or original research data. While outside sources are occasionally quoted, no systematic examination has been made of the many published books and articles and of the studies prepared by governments which, in the libraries and official files of the different countries, undoubtedly contain much information that would fill in gaps in this report as well as provide correctives to data reported.3 Countries that have not supplied the international organizations with information on their social conditions (whether because such information has not been collected, or because the country has not been a member of all-or any-of the relevant international bodies, or for other reasons) are not adequately represented in the report. It would be unfortunate if countries whose contributions have made this report possible were, as a result, subjected to criticisms that might well apply with equal or greater force to countries which have not made information available. The Secretary-General regrets that full information is not available for all areas but he has concluded that this shortcoming is outweighed by the basic function that the report must fulfil of portraying social needs. If the world community is to help its less fortunate members, then their needs must be understood. When, in a United Nations meeting, the representative of a less-developed country points to the low level of literacy or of income in his country, this is evidence of the serious desire of his country to have conditions improved—an attitude that the international community must applaud. Much of the information in this report has been so provided by governments seeking to improve the lot of their peoples.

Secondly, it must be emphasized that, in accordance with the original terms laid down for this project, it attempts to report on existing social conditions, but not on governmental (or inter-governmental or non-governmental) programmes to improve those conditions. Other reports requested of the Secretary-General call

<sup>&</sup>lt;sup>1</sup> United Nations document E/CN.5/208. This document gives a detailed description of the origin of the project and the early views expressed by member States.

<sup>&</sup>lt;sup>2</sup> See Economic and Social Council resolution 309 F (XI) of 13 July 1950, United Nations document E/1849, p. 41.

<sup>&</sup>lt;sup>3</sup> In this connexion, it should be recalled that no additional staff was budgeted for this project and that there are no regional social commissions to gather information on social conditions in the manner in which the regional economic commissions gather information on economic conditions,

for analyses of governmental measures to raise standards of living. To have included that subject in the present report would have carried the report beyond practical limits. The present report, therefore, does not attempt systematic analysis of social legislation and social security systems, welfare and health programmes, community development projects, and like programmes and measures, although references to these topics are occasionally made. Again, this would lead to an unfortunate situation if it should be judged that nothing is being done about the conditions described. Partially compensating for this difficulty, however, the report indicates trends in conditions—and thus improvements—wherever possible. But an adequate discussion of governmental and international programmes to improve conditions can only be given in another volume.

The report does not propose to cover the entire field embraced by the word "social" but, as the sub-title indicates, considers the world social situation "with special reference to standards of living". No attempt is made to analyse the differing social structures, religions, systems of belief, cultural patterns and values that different human societies have evolved; attention has been given to such matters only where it has been considered necessary because of their immediate bearing upon standards of living.

Nor are human rights, crime and delinquency, narcotics addiction and similar problems included. While these subjects—which involve moral questions, not merely questions of poverty and need—are considered to be closely related to standards of living in the broadest sense, lack of data, and limitations of time and of facilities to obtain the necessary data, have not permitted their discussion in the present report.

The concept of "standards of living" has not yet received a clear and uniformly agreed-upon meaning from an international point of view. The present report has not sought to resolve the problem of cultural rela-

tivity involved, but has concentrated upon certain major factors that appear to have universal agreement as basic ingredients of a decent life—agreement that is reflected in the structure and the stated goals of the United Nations and the specialized agencies.

After an introductory chapter and a background chapter on population, the report deals with these factors on a subject-matter basis—health, food and nutrition, housing, education and communication, conditions of work and employment, special problems affecting living standards, and general levels of income and welfare.<sup>6</sup> The concluding three chapters, however, attempt a regional approach, in order to gain a general picture of living conditions in particular areas (Latin America, the Middle East, South and Southeast Asia).

Throughout the report, the stress is upon social conditions in the economically less-developed areas, because it is in these areas that the needs are greatest.

At the same time, they are precisely the areas regarding which there is least systematic information. In fact, a refined system of information-collection is itself an aspect of development. In many instances, it has been necessary to rely upon generalizations, fragmentary evidence, and probable approximations to facts, rather than upon known facts themselves. Indeed, a clear need emerges for a more systematic body of knowledge that is based upon first-hand study of representative groups of the population.

Yet, to defer any attempt at assessment of social conditions and consequent action until complete and indisputably accurate data are available would have the effect of postponing efforts to relieve human misery. The needs are often sufficiently evident to permit findings that can guide action, even though scientific purity of statistics is still lacking.

In presenting this preliminary report, the Secretary-General wishes to acknowledge the generous assistance of the International Labour Organisation, the Food and Agriculture Organization, the United Nations Educational, Scientific and Cultural Organization and the World Health Organization.

<sup>&</sup>lt;sup>4</sup> See report of the seventh session of the Social Commission, annex III, "Social Conditions and Development", United Nations document E/1982-E/CN.5/254, p. 29.

<sup>&</sup>lt;sup>5</sup> It has, in fact, an ambiguous meaning in the English language, implying, on the one hand, the conditions of living actually achieved and, on the other hand, those that are sought or desired or used as standards by which to assess actual conditions. The expression "levels of living" has been increasingly used by some authorities to cover the first sense. In conformity with the wording of the Charter of the United Nations and the phrasing of various United Nations resolutions, however, this report will maintain the expression "standards of living", employing it in the first sense as equivalent to "levels of living".

<sup>&</sup>lt;sup>6</sup> When conditions in different regions are discussed in different chapters, it has not been possible to follow consistently the same regional breakdowns because the original data, often involving regional estimates, have been compiled in different ways. For example, in one chapter the term "Middle East" may be used, while in another chapter the term "Near East"—with a slightly different coverage—may be used. It should furthermore be noted that the report does not, in general, attempt to present conditions in countries and territories with a population of less than 200,000.

# Chapter I

#### INTRODUCTION

While modern science and technology—particularly the development of communication and transportation -have been drawing the different parts of the world closer together and making them more interdependent, a far-reaching change in outlook upon world social problems has been taking place. To an extent which might have seemed inconceivable even fifty years ago, there has come increasing recognition that 2,400 million people have somehow to contrive to live together, and share together the resources of the earth; that the general impoverishment of any area is a matter of concern to all areas; and that the technical experience and knowledge acquired in rapidly changing industrialized societies have somehow to be made available to those communities that are less advanced and less well-equipped. That this has come to pass is an historical and inspiring fact. Indeed, it has been suggested by a distinguished historian that, in the broad sweep, the twentieth century will be chiefly remembered in future centuries not as an age of political conflicts or technical inventions, but as an age in which human society dared to think of the welfare of the whole human race as a practicable objective.

In the basic ethics of all great religions, there has been the recognition that the better-endowed must help those who are less fortunate; but, developing from this deep impulse of human charity and consistent with voluntary help and personal giving, there is a new and wider concept: governments have accepted the principle that in the interests not only of their own communities but of the world in which these communities exist, they must organize and undertake mutual aid. This principle is valid on the material as well as on the moral plane; it is practical well-doing or "enlightened self-interest" on the part of countries that extend such aid to other areas; and countries that are raising their standards are helping to contribute to the equilibrium of world society. Amid the political tensions of the present day, this principle is universally avowed as a goal of international policy and a measure of international action.

Simultaneously with the growth of an international ethic of mutual aid, there has spread among impoverished peoples of the world an awareness—heightened by modern communications and movements of men—that higher standards of living not only exist for others but are possible for themselves. Fatalistic resignation to poverty and disease is giving way to the demand for a better life. The demand is groping and uncertain in direction, charged with conflicting emotions regarding the old and the new, but it is none the less a force that is establishing an irreversible trend in history.

It is against the background of this ethic and this demand that the report on the world social situation is presented. It is itself a product of these forces, and will

be justified only if it helps to clarify the needs and problems that must be faced.

The greatest obstacles to social progress—disease, ignorance and poverty—have perpetuated themselves throughout history, each being in part the cause and in part the consequence of the others. Action against them is advancing. Against disease the general advance has been substantial in recent years, and, in some of the less-developed areas, it has been dramatic, with death rates dropping as much as 50 per cent in a few years' time. The extension of modern methods of mass-disease control, which can eliminate such scourges as malaria at relatively little cost, accounts in good part for these successes. Nevertheless, millions of human beings are still ravaged by diseases that are readily amenable to control—diseases that cause not only untold misery but also immense economic loss.

Against illiteracy and ignorance, some notable recent advances have been made, but the obstacles are great. Lacking school facilities and rural transport systems as well as adequate administrative and fiscal systems, confronted often with a multiplicity of local tongues and almost always with a vast and expanding child population, the less-developed countries, with a few exceptions, have found universal schooling beyond their present financial means. They are undertaking or planning expansions; but, at the same time, so urgent is the need in poverty-stricken communities for knowledge of practical ways of raising living standards, that governments are also giving increasing attention to mental education" and similar methods of introducing necessary knowledge and skills before regular schooling is established.

Against poverty, the advance has been uneven, and generally least impressive where poverty is greatest. The world at large has made tremendous (though uneven) strides recently in the industrial production of goods. Agricultural production, however (which occupies the majority of the people in the less-developed areas), is no greater per capita for the world at large than before the war, and in the less-developed areas it is significantly less, because of population increase, war, political disturbances and other factors. The gap between the rich and the poor countries in general levels of production and consumption is wider than before the Second World War.

From the point of view of the distribution within countries of the goods produced, a certain levelling process appears to be under way in countries with relatively high and expanding national incomes: the poorer groups are receiving a larger share of the total income; wage differentials between occupational groups are narrowing; progressive labour legislation and systems of social security are defining minimum levels of welfare below which society does not permit individual

members to sink—and these levels are being progressively redefined upwards.

In the less-developed countries, some recent improvements in the fields of large-scale industrial labour and plantation labour have likewise taken place. Yet, for the great masses of the people, who are illiterate peasants engaged in small-scale farming with primitive techniques, general poverty does not appear to have been substantially reduced in recent years—it has, in wide areas, quite possibly been aggravated as a result of declines in per capita agricultural production. Social security measures, labour legislation and various measures for the general welfare have had less effect upon these isolated and impoverished rural groups. In fact, it may be said that the peasants of underdeveloped areas have been the forgotten men of the twentieth century and have benefited less from its changes than any other group. There is, however, growing recognition of their plight and increasing efforts, both national and international, to deal with it, as shown by the emphasis recently given to the importance of land reform and other agrarian measures.

The ancient social problems are not the only ones to be faced. Some of the most urgent social problems and needs of the present day are associated with the very process of change and development. The drastic reductions in mortality now being achieved in some of the less-developed areas are producing rapid accelerations in population growth. Birth rates are remaining at their old high levels, and it appears unlikely, in view of present trends, that they will decline significantly in the near future. As more and more of the less-developed areas come under the influence of this "demographic revolution", accelerated world population growth may be anticipated.

If present standards of living are to be maintained, food production must expand as rapidly as population growth; and if a better life is to be achieved for many millions who do not have adequate food today, it must expand more rapidly (as well as improve in quality). Over the last fifteen years, with the Second World War intervening, food production has in fact increased less than population in many parts of the world—and particularly in areas where rapid population growth seems likely. Whether this imbalance will continue in the future cannot be foretold, since much will obviously depend upon human ingenuity and human efforts in meeting the problem. It should be noted that, while certain types of mortality reduction through control of mass disease may require only a consenting population (though good health requires much more), the increase of food production demands active and instructed cooperation, and in many cases it requires changes in deep-rooted customs and practices, resettlement, land reform, large-scale irrigation and conservation projects, and other far-reaching actions. The actual extent to which the food-producing capacity of the earth can be expanded by improved methods of cultivation, recovery of wastelands, exploitation of marine and inland waters and other means, poses a fundamental problem toward which international and national bodies are directing constant attention and efforts.

Another consequence of swift population increase, combined with the effects of war and economic stress,

has been a deterioration of the housing situation in many areas, particularly in less-developed areas where economic resources and technical means to cope with it are lacking. Congestion and slum conditions are especially noticeable in cities that have grown phenomenally during the last decade or so as a result chiefly of migration from the countryside. (Serious housing problems exist also in all the more-developed areas; the majority of European cities, for example, are still faced with shortages that were associated with the rapid urbanization of the nineteenth century, and were aggravated by two wars.)

Such cities in many less-developed countries now contain large floating populations of unskilled workers of peasant origin, beset by many problems and needs. This situation, together with underemployment found very extensively among the rural peasantry, constitutes a tremendous waste of potentially productive manpower.

The processes of change from rural subsistence economies to more complex market and monetary economies, with their greater mobility and urbanization, are giving rise to peculiarly urgent social problems among the transitional groups. Such support as was provided traditionally by mutual aid within the extended family and the local community becomes less and less available to the unfortunate—the sick, the unemployed, the handicapped, the aged, the homeless, the mentally afflicted. Larger units of society, particularly the State, are increasingly taking over responsibility, but there is often a lag in the development of the appropriate services.

Finally, it cannot be forgotten that with widening involvement in the benefits of modern civilization there is widening involvement in its failures. The standards of living in large parts of the world are, in fact, still depressed by the effects of the Second World War and its aftermath. Some of the consequences of war have been mitigated by the fact that the international community itself undertook responsibility for postwar relief and rehabilitation and for the continuing care of refugees and similar victims.

The problems mentioned in this introduction, together with many related problems, are considered in more detail in the following chapters. These chapters indicate that more than half the population of the world is still living at levels which deny them a reasonable freedom from preventable disease; a diet adequate to physical well-being; a dwelling that meets basic human needs; the education necessary for improvement and development; and conditions of work that are technically efficient, economically rewarding and socially satisfactory.

Every government is now wrestling with these problems according to its abilities. The transition to higher standards of living is a long and arduous process, which requires the support of the spiritual as well as the physical resources of a nation. Mutual aid among nations and cultures can facilitate the process. It is hoped that the facts presented in this report may assist the Member States, the Economic and Social Council and the Social Commission in the formulation of social policy and the planning and organization of effective international actions in the social field.

# Chapter II

# BACKGROUND FACTS ON WORLD POPULATION AND POPULATION TRENDS

#### Introduction

Important progress has been made in recent years in the development of population statistics. Information on demographic subjects is generally better than that on nearly any other measurable social phenomenon. There is still need, however, for much improvement. Accurate periodic censuses of population and comprehensive systems of birth and death registration are fairly recent innovations in a great many countries; in others, no census has ever been taken and no registration systems exist. Only rough estimates are available for areas inhabited by at least one-third of the world's population, and the statistics for another third are generally inadequate.<sup>1</sup>

The total of the world's population was estimated at 2,430 million in mid-year, 1951, distributed by regions approximately as follows:<sup>2</sup>

|                  | population<br>in millions<br>(mid-1951) |
|------------------|---|
| World total      | . 2,430                                 |
| Africa           | . 202                                   |
| Northern America | . 169                                   |
| Latin, America   | . 165                                   |
| Asia             | . 1,283                                 |
| Europe:          |   |
| Oceania          | . 13                                    |

The regional distribution of population is more significant when related to the distribution of land areas. While the average population density of the world as a whole is about eighteen persons per square kilometre, population densities for the various regions range from two persons per square kilometre in Oceania to forty-seven per square kilometre in Asia (excluding the Asiatic part of the USSR). The population density of Europe, exclusive of the USSR, is even higher and averages eighty persons per square kilometre. The Americas, with a population density of eight persons per square kilometre, and Africa, with seven persons per square kilometre, occupy intermediate positions.<sup>3</sup>

Such density ratios, however, take no account of variations in the quality of the land surface caused by differences in climate, topography, mineral wealth, fertility of the soil, etc. They also take no account of regional differences in urbanization and industrialization. Frequently they cover up even wider variations within regions. Thus, while the Americas as a whole have a low population density, the Caribbean islands are very densely populated: Puerto Rico has 249 persons per square kilometre and Haiti has 112. Europe contains several countries which are thickly settled, such as the Netherlands with 312 persons per square kilometre, and a number of countries with quite low densities, such as Norway with ten and Finland with twelve persons per square kilometre. Population density may also vary enormously in different parts of the same country. The average density figure of twenty for Egypt is greatly misleading, since most of Egypt's area is desert; in the small portion of the country that is actually settled, the ratio is over 500 persons per square kilometre. Within some countries the distribution of settlements has been determined to a large extent by historical factors and is poorly adapted to the distribution of land and other resources. Thus, in Indonesia, the islands of Java and Madura have an average population density approximating 360 persons per square kilometre, while the average for the other islands of the Indonesian archipelago is only about seventeen.4

High average population densities may be associated with either a high or a low degree of economic development. In highly industrialized countries, high population density is primarily a matter of urban concentrations rather than of excessive pressure of rural population on cultivated land:

| 1  | Population<br>ber square<br>kilometre<br>of total<br>area<br>(1950) | Percentage<br>of urban<br>population* | Per-<br>centage<br>of culti-<br>vate <b>d</b><br>land <sup>b</sup> | Rural population per square kilometre of culti- vated land |
|--|---|---------------------------------------|--|--|
| Netherlands                                | 312   | 55 (1947)                             | 68   | 182  |
| United Kingdom (England and Wales) Belgium |   | 81 (1951)<br>63 (1947)                | 65<br>57   | 85<br>181  |
| Germany (Federal Republic)                 | 194   | 71 (1950)                             | 58   | 97   |

<sup>&</sup>lt;sup>a</sup> Definitions of "urban" and "rural" vary so much from country to country that the figures can be considered only as very rough indications of an order of magnitude in this and the following tables.

<sup>&</sup>lt;sup>1</sup> The figures quoted in this chapter are drawn largely from the official statistics of the various countries and from the world and regional estimates made by the United Nations Secretariat on the basis of these statistics. Most of these statistics can be found in the Demographic Yearbook, the Population Bulletin, and the report on World Population Trends, 1920-1947. Where data are taken from other sources, the sources are indicated.

<sup>&</sup>lt;sup>2</sup> In this table, and similar world tables in this chapter, "Northern America" covers Canada, the United States, Greenland, St. Pierre and Miquelon, and Alaska; "Latin America" includes Mexico, Central and South America and the Caribbean Islands; the Asiatic part of the USSR is included in "Europe", not "Asia"

<sup>&</sup>lt;sup>3</sup> The regional figures are compiled from data on individual countries and relate to land areas plus inland waters. The area of polar regions and of a few uninhabited islands is excluded.

the following tables.

<sup>b</sup> Figures on cultivated land include improved pastures where data for that type of land use are available separately (Belgium, England and Wales). In the case of the Netherlands and of the Federal Republic of Germany it is assumed that practically all permanent pastures are improved.

<sup>&</sup>lt;sup>4</sup> Calculated on the basis of the population distribution shown by the census of 1930, with the assumption that the rate of population increase since that date has been equal throughout the country.

In the countries where there is relatively little industry or urbanization and where agriculture is carried on largely by the laborious methods of hand cultivation, a high average density commonly means a heavy concentration of rural population on the cultivated lands:

| p   | Population<br>ver square<br>kilometre<br>of total<br>area<br>(1950) | Percentage<br>of urban<br>population | Percent-<br>age of<br>culti-<br>vated<br>land | Rural population per square kilometre of culti- vated land |
|---|---|--------------------------------------|---|--|
| Egypt (settled area) Puerto Rico Ceylon India | 538   | 30 (1947)                            | 2.5   | 542  |
|   | 249   | 41 (1950)                            | 45  | 327  |
|   | 115   | 15 (1946)                            | 22  | 451  |
|   | 113   | 17 (1951)                            | 46  | 238  |

<sup>\*</sup> Adapted from Yearbook of Food and Agricultural Statistics, 1949 and 1950, part I, "Production".

Japan represents a rather exceptional case of a relatively large urban and industrial population (49 per cent urban in 1948) combined with a high concentration of rural population (rural density of 698 per square kilometre of cultivated land).

Low average population densities are also found in both less-developed and more-developed countries. Low density of population is generally associated with a low percentage of cultivated land out of the total amount of land. The low percentage of cultivated land may be due to the poor quality of the uncultivated lands; to natural obstacles to cultivation, such as deserts, mountains or malaria-infected jungles; to land uses other than cultivation, as in unimproved pasture and forested land; to primitive methods that limit the area a farmer can cultivate; to social obstacles, such as land ownership systems which keep land out of production; or simply to sparse population.

Since the more-developed countries of low general density have, as a rule, large proportions of their populations living in towns and cities, their rural population densities are usually very low:

|               | Population<br>per square<br>kilometre<br>of total<br>area<br>(1950) | Percentage<br>of urban<br>population | Percent-<br>age of<br>culti-<br>vated<br>land* | Rural<br>population<br>per square<br>kilometre<br>of culti-<br>vated land |
|---------------|---|--------------------------------------|--|---|
| United States | 19  | 64 (1950)                            | 39b  | 18  |
| Argentina     |   | 63 (1947)                            | 11   | 20  |
| Canada        | 1   | 58 (1951)                            | 7  | 16  |
| Australia     | 1   | 69 (1947)                            | 2.4 <sup>b</sup>                               | 13  |

Adapted from Yearbook of Food and Agricultural Statistics, 1949 and 1950, part I, "Production".

<sup>b</sup> Figures on cultivated land include improved pastures.

Less-developed countries of correspondingly low general density, on the other hand, often have a concentration of rural population on actually cultivated land that is as great as the rural concentration found in the most densely populated industrial countries:

|                          | Population<br>per square<br>kilometre<br>of total<br>area<br>(1950) | Percentage<br>of urban<br>population | Percent-<br>age of<br>culti-<br>vated<br>land | Rural<br>population<br>per square<br>kilometre<br>of culti-<br>vated land |
|--------------------------|---|--------------------------------------|---|---|
| Mexico<br>Union of South | . 13  | 35 (1940)                            | 5   | 164   |
| Africa                   | . 10  | 42 (1951)                            | 5   | 119   |
| Honduras                 | . 10  | 31 (1951)                            | 4   | 189   |
| Brazil                   | . 6   | 37 (1951)                            | 2.8   | 140   |

<sup>\*</sup> Adapted from Yearbook of Food and Agricultural Statistics, 1949 and 1950, part I, "Production".

### BIRTH RATES

The two basic factors determining world population growth—births and deaths—are not recorded at all in a number of countries, particularly in Asia and Africa, and there is wide variation in the coverage and completeness of records among those countries that do have registration systems. In some countries, registration is not compulsory, or is not compulsory for all ethnic groups in the population. The "registration areas" that have been established do not always cover the entire country. Other difficulties arise from the fact that births and deaths, even in registration areas, are not always registered; for example, babies dying shortly after birth are often omitted from the statistics. Where birth and death rates are calculated on the basis of incomplete reports, improved registration may—and frequently does—result in an increase in rates that is more apparent than real. An additional factor likely to distort birth and death rates is ignorance of the exact size of the total population. Any error in population estimates would be followed by a corresponding error in calculated birth or death rates, even if the number of births or deaths were accurately known. Errors could conceivably be compounded.

The United Nations Secretariat has estimated crude birth rates (the number of births during a calendar year per 1,000 persons in the mid-year population of a given area) in the various regions, around 1947, as follows:

Crude birth rates around 1947 (by regions)

| Regions          | Estimated<br>birth rates<br>per 1,000<br>population <sup>2</sup> |
|------------------|--|
| World            | 35 - 37  |
| Africa           | <b>40</b> – 45   |
| America:         |  |
| Northern America | . 25   |
| Latin America    | 40   |
| Asia             | 40 – 45  |
| Europe           | . 24   |
| Oceania          | . 28   |

<sup>\*</sup>The rates are based on weighted averages of the 1946-48 crude birth rates for areas for which such data were available. For other regions or parts of regions, unofficial estimates and analyses were used, and in some cases rates in neighbouring areas or in areas with similar conditions were taken into consideration. Census statistics showing the age composition of the population were used for some countries to indicate the probable levels of fertility. For a fuller discussion of the methods used in preparing the regional estimates, see pages 13-14 of the English text of the Demographic Yearbook 1949-50.

Birth rates recorded for individual countries within each of the major regions show considerable variation, part of which is doubtless due to differences in the degree of completeness of registration as well as to actual differences in fertility; countries without registration systems can generally be assumed to have high birth rates. In Asia, for example, where the average postwar birth rate for the region as a whole has been estimated to be between 40 and 45 per 1,000 population, recently recorded rates are actually that high for only a few countries (1947-49 averages, unless otherwise indicated):

| Singapore 46.4              | Japan 33.6    |
|-----------------------------|---------------|
| Federation of Malaya 42.4   | Cyprus 31.1   |
| French India (1948-49) 40.1 | India 26.0    |
| Ceylon 40.0                 | Thailand 25.3 |
| Korea (1942-44) 36.4        | Lebanon 22.2  |

The figures for Lebanon and Thailand are probably considerably understated. The average for India is known to be too low, owing to under-registration and to the fact that "registration areas" do not include the whole country.5 No recent data are available for countries such as Indonesia, the Philippines and Burma, where the registration systems have not yet been reorganized after the disruption caused by hostilities and occupation. Only fragmentary information exists with regard to birth rates in the other countries of Asia. For China, a range of 40—45 has been estimated.6 For Arabic countries other than Egypt, no reliable data are available. In the latter country, the birth rate has, in recent years, remained around 42; that of the Arab population of undivided Palestine averaged 49.8 in the period of 1932-38. It may be inferred that the birth rates of most other Arabic countries are probably of similar magnitude; this may be true also of Turkey and Iran. However, no trustworthy data are available for these countries.

Very little is also known about birth rates in individual countries and territories of Africa, south of the Sahara, other than the Union of South Africa. Available rates for a few African countries are as follows (1947-49 averages, unless otherwise indicated):

| Mauritius 44.2         | Sierra Leone                             |
|------------------------|--|
| Egypt 42.7             | (colony only) 34.6°                      |
| Réunion (1949) 41.2    | Gold Coast (registration area only) 33.8 |
| Algeria (Moslems) 41.1 | Tunisia (1948) 33.1                      |

<sup>\*</sup>Vital Statistics in Non-Self-Governing Territories, United Nations document A/AC.35/L.57.

In Latin America and the Caribbean area, birth rates reported from individual countries were as follows (1947-49 averages, unless otherwise indicated):

| Guatemala      | 51.9         | Trinidad and Tobago. | 38.8 |
|----------------|--------------|----------------------|------|
| Ecuador (1950) |              | Dominican Republic   | 38.1 |
| El Salvador    | 46.0         | Windward Islands     | 36.6 |
| Mexico         |              | Panama               | 35.1 |
| Costa Rica     | <b>43.</b> 8 | Colombia             | 34.8 |
| Paraguay       |              | Chile                | 33.6 |
| (1944-46 av.)  |              | Jamaica              |      |
| Honduras       | 40.8         | Martinique (1949)    | 29.8 |
| Puerto Rico    | 40.7         | Peru                 |      |
| Brazil         | 40.0°        | Argentina            |      |
| Venezuela      | 39.8         | Cuba                 |      |

<sup>&</sup>lt;sup>a</sup> Official minimum estimate in: Instituto Brasileiro de Geografia e Estatística: Estimativas de Taxa de Natalidade para o Brasil, as Unidades da Federação e as Principais Capitais, Rio de Janeiro, 1948; maximum of estimated range is 48.

In the case of a few of the Latin-American countries reporting low birth rates, actual rates may be considerably higher. Thus in Cuba, where birth registration is not mandatory, it is fairly certain that the recorded rate is below the true figure. In Peru, reported birth rates for cities (where registration is likely to be more complete) are much higher than the reported national rate, and range from 33 to 49.8 Not all the differences in rates, however, are to be explained by varying standards of registration; Argentina, for example, is unquestionably below the regional average.

Europe as a whole has a lower average birth rate than any other region. Rates range from 29 down to 14. For individual countries, rates are as follows (1947-49 averages, unless otherwise stated):

| Poland          | 28.4 | France 21.1                |
|-----------------|------|----------------------------|
| Yugoslavia      |      | Norway 20.5                |
| Finland         |      | Denmark 20.4               |
| Greece          | 26.8 | Hungary (1947-48 av.) 19.9 |
| Netherlands     | 25.6 | Switzerland 19.0           |
| Portugal        | 25.3 | United Kingdom 18.6        |
| Bulgaria (1947) | 24.0 | Sweden 18.3                |
| Romania (1946)  | 23.8 | Saar 18.2                  |
| Czechoslovakia  | 23.2 | Austria 17.6               |
| Ireland         |      | Belgium 17.5               |
| Spain           | 22.1 | Germany (Western) 16.7     |
| Italy           |      | Luxembourg 14.7            |

The very lowest birth rates (14 to 23) are in the predominantly industrial countries of North-West-Central Europe (Netherlands is exceptional). This is true in spite of the fact that the rates recently recorded for many of the countries of this group are abnormally high, reflecting a remarkable upsurge of births in the immediate postwar years. All reporting Eastern and Southeastern European countries have birth rates in the 23—29 range.

The relatively wealthy non-European countries inhabited by populations of almost exclusively European origin have birth rates comparable to the higher European rates. In these countries also, the rates observed recently have been unusually high; prior to the Second World War they were much nearer to the levels of the lower European rates. In addition to Argentina, already mentioned, they are the following:

| Northern America   | Oceania          |
|--------------------|------------------|
| Canada 27.6        | New Zealand 25.6 |
| United States 24.7 | Australia 23.4   |

<sup>&</sup>lt;sup>8</sup> Birth rates for major Peruvian cities in 1946, as reported by Dr. R. Passmore in his report on Nutrition and Health of Children in Five Countries of South America, United Nations document E/ICEF/83, were as follows: Callao, 48.1; Chiclayo, 49.1; Cuzco, 40.3; Lima, 34.4; Iquitos, 33.7. Reported national rate for the same year was 26.9.

<sup>5</sup> With regard to India, "A birth rate of 45 has been computed for the decade 1931-41 on the basis of the proportion of children under 10 as it appears in the incompletely tabulated age returns of the 1941 census." (See Kingsley Davis, "Demographic Fact and Policy in India," in Demographic Studies of Selected Areas of Rapid Growth, p. 41, New York 1944, Milbank Memorial Fund). According to another estimate, the average Indian birth rate during the same intercensal period was 48 (see P. C. Mahalanobis, "Problems of Current Demographic Data in India," as summarized in Findings of Studies on the Relationship between Population Trends and Economic and Social Factors: Historical Outline of World Population Growth, United Nations document E/CN.9/89, para. 59). A main difficulty with regard to vital statistics in India is the inadequacy of basic figures originating at the village level.

<sup>&</sup>lt;sup>6</sup> United Nations, Population Studies, No. 3, World Population Trends, table 2.

<sup>&</sup>lt;sup>7</sup> The birth rate for the Jewish population of Israel was 32.9 in 1950. This figure is not used in any of the tables included in this section, inasmuch as the continuing immigration into Israel of population elements with heterogeneous social and cultural traditions results in continuous changes of that country's population structure and subjects the birth rate to frequent fluctuations.

The same is true for the European population of the Union of South Africa which has a birth rate of 26.6 (all the above rates are 1947-49 averages).

In general, it may be noted that reported birth rates for individual countries vary widely between 15 and 52 per 1,000. All countries of the world that may be classified as economically and industrially advanced fall below 30 in their birth rates (Japan was above that figure in 1947-49 but dropped to 28.5 in 1950). Nearly all less-developed countries lie above 30, and almost all exceptions are probably due to under-registration. The actual differences are probably greater than the apparent ones, since it is the economically underdeveloped high-fertility countries that usually have incomplete registration.

# Trends of birth rates

The varying levels of crude birth rates indicated above generally correspond to different stages in the historical development of industrialization and urbanization. Until recently, birth rates, in so far as they were known, were either stationary (in the less-developed countries) or declining (in the more-developed countries). However, in many countries for which information is available, reported birth rates—contrary to expectations—have shown a significant increase in the last two decades. The meaning of this increase is not entirely clear. Even countries with already high fertility have reported increases in their rates:

|                      | 1932-34<br>average | 1937-39<br>average | 1942-44<br>average | 1947-49<br>average | 1950-51<br>average |
|----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Asia                 |                    |                    |                    |                    | _                  |
| Federation of Malaya | 36.9               | 40.7               | •••                | 42.4               | 42.8               |
| Singapore            | 40.3               | 46.1               | •••                | 46.4               | 46.0               |
| Latin America        |                    |                    |                    |                    |                    |
| Colombia             | 27.9               | 31.5               | 32.6               | 34.8               | 36.7               |
| Costa Rica           | 44.4               | 44.3               | 43.1               | 43.8               | 47.0               |
| El Salvador          | 41.6               | 43.1               | 42.3               | 46.0               | 48.5*              |
| Honduras             | 32.2b              | 37.3               | 37.1               | 40.8               | 39.0               |
| Mexico               | 43.3               | 44.1               | 45.1               | 45.3               | 45.7               |
| Venezuela            | 27.8               | 34.4               | 35.7               | 39.8               | 43.6               |

<sup>\* 1950</sup> only.

The extent to which these increases in reported birth rates indicate an actual increase (which might be due to improved health conditions, resulting in fewer miscarriages and deaths in childbirth and thus rendering women capable of bearing more children; changing age composition; changing economic conditions, etc.) or an improvement in registration procedures, respectively, cannot readily be ascertained. It is likely, however, that, especially in cases where the rate of increase in official figures has been particularly high (Colombia, Honduras, Venezuela), improved registration is largely responsible.

In a number of other high fertility countries the reported birth rates have either been practically stationary over the last two decades, or subject to temporary changes, with a stationary tendency:

|                          | 1932-34      | 1937-39      | 1942-44 | 1947-49 | 1950-51 |
|--------------------------|--------------|--------------|---------|---------|---------|
|                          | average      | average      | average | average | average |
| Ceylon                   | <b>37.</b> 9 | 36.5         | 38.1    | 40.0    | 38.8    |
| Gold Coast (registration |              |              |         |         |         |
| area only)               | 32.9         | 36.2ª        |         | 33.8    |         |
| Egypt                    | 42.8         | <b>4</b> 2.9 | 38.7    | 42.7    |         |
| Jamaica                  | 32.6         | 32.3         | 32.5    | 31.8    | 33.5    |
| Puerto Rico              | 39.2         | 38.8         | 39.5    | 40.7    | 37.8    |
| Chile                    | 33.4         | 32.6         | 33.1    | 33.6    | 32.4    |

a 1939 only.

All of the above countries have reasonably efficient registration systems, and on this basis it might be inferred that, in high fertility countries in general at the present time, actual birth rates tend to be nearly stationary.

In the industrially developed low-fertility countries around 1930, birth rates were universally declining. That decline had been a continuous process for a number of decades, and in some cases for more than a century. However, in most of these countries, the decline of the birth rates halted during the 1930's. Thereafter increases occurred, especially during the years following the depression and those following immediately after the Second World War. The amounts and timing of the increases differed in such a way as to make generalization difficult. A study of trends indicates that in fifteen countries of this type the increase in the birth rate from the previous minimum to the recent maximum amounted to more than 30 per cent.

It is not yet known to what extent these increases are temporary, or whether they herald a permanent change of the birth rate trend. Most of the studies which have been made for particular countries of this type suggest that a major factor has been the crowding together, in this period, of unusually large numbers of marriages. Fewer people have been remaining bachelors and spinsters, but the upsurge has been largely due to marriages previously postponed by the depression or war, and to marriages advanced to an earlier date because peace and prosperity have encouraged marrying at younger ages. The newly married couples, furthermore, have shown a tendency to begin having children earlier than had been the custom formerly. In addition, many couples had deferred having children during the depression years. The cumulative effect was a large increase in the birth rates. After 1947 or thereabouts, rates declined in some countries, but in nearly all of them the rates were still higher in 1950 than in the 1930's. The ultimate effect which these changes will have on the size of completed families will not be known until families established since the early 1940's are further along on their fertility cycle.

The trends of birth rates in the industrialized European countries, as well as in non-European countries inhabited by populations of predominantly European origin, are indicated in table I:

<sup>&</sup>lt;sup>b</sup> 1933-34 average.

<sup>&</sup>lt;sup>9</sup> Findings of Studies on the Relationship between Population Trends and Economic and Social Factors, "Economic and Social Factors affecting Fertility", United Nations document E/CN.9/82, para. 22.

| Table I  |  |
|--|--|
| Trend of birth rates (per 1,000 population) in<br>Northern America and Oceania |  |

| Country                | 1881-85<br>average* | 1905-09<br><b>a</b> verage | 1932-34<br>average | 1937-39<br>average | 1942-44<br>average | 1947-49<br>average | 1950-51<br>average |
|------------------------|---------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Austria                |                     |                            | 14.3               | 15.8               | 17.9               | 17.6               | 15.1               |
| Belgium                | 30.9                | 25.1                       | 16.9               | 15.6               | 14.5               | 17.5               | 16.5               |
| Czechoslovakia         |                     | 33.0°                      | 18.8               | 17.2               | 21.1               | 23.2               | 22.91              |
| Denmark                | 32.4                | 28.4                       | 17.7               | 18.0               | 21.5               | 20.4               | 18.2               |
| Finland                | 35.5                | 31.0                       | 19.1               | 20.7               | 19.4               | 27.2               | 23.6               |
| France                 | 25.0                | 20.1                       | 16.8               | 14.9               | 15.7               | 21.1               | 20.0               |
| Ireland                |                     | 23.4                       | 19.3               | 19.2               | 22.1               | 22.3               | 21.2               |
| Netherlands            | 240                 | 30.0                       | 21.1               | 20.3               | 22.7               | 25.6               | 22.5               |
| Norway                 | 21.0                | 26.7                       | 15.1               | 15.4               | 19.0               | 20.5               | 18.8               |
| Poland                 |                     | 37.8° d                    | 27.3°              | 24.6° <sup>‡</sup> |                    | 28.4               | 30.51              |
| Sweden                 |                     | 25.6                       | 14.0               | 14.9               | 19.2               | 18.3               | 16.0               |
| Switzerland            | 00 =                | 26.4                       | 16.5               | 15.1               | 19.1               | 19.0               | 17.6               |
| United Kingdom         |                     | 24.3                       | 15.3               | 15.3               | 16.8               | 18.6               | 16.0               |
| Canada                 |                     | • • •                      | 21.4               | 20.3               | 23.8               | 27.6               | 26.6 <sup>1</sup>  |
| United States          |                     | 25.1g h                    | 17.1 <sup>g</sup>  | 17.3               | 20.8               | 24.7               | 24.0               |
| Australia <sup>1</sup> | 25.0                | 26.6                       | 16.7               | 17.5               | 20.2               | 23.4               | 23.1               |
| New Zealandi           |                     | 27.3                       | 16.8               | 18.0               | 21.0               | 25.6               | 24.5               |

<sup>\*</sup> Data for 1881-85 from R. R. Kuczynski, "The International Decline of Fertility", in *Political Arithmetic*, p. 52, Lancelot Hogben, F.R.S., Editor.

Present territory. e Warsaw, Lodz, Kielce and Lublin provinces.

d 1911 only.

<sup>1</sup> 1950 only.

In Southern and Southeastern Europe, birth rate trends have shown a somewhat different picture from those in Western and Northern Europe. Rates were still relatively high around 1930. They had begun to decline only around the turn of the century (several decades after the analogous decline began in most countries of Western and Northern Europe) and by the early 1930's had not reached the low levels then prevailing in the latter countries. The declining trend was uninterrupted throughout the 1930's; though a reversal set in, at least temporarily, after the Second World War, it was not sufficient to offset the decline which had occurred since 1930.

| Country              | 1905-09<br>average | 1932-34<br>average | 1937-39<br><b>a</b> verage | 1942-44<br>average | 1947-49<br>average | 1950-51<br>average |
|----------------------|--------------------|--------------------|----------------------------|--------------------|--------------------|--------------------|
| Bulgaria*            | 42.5               | 30.3               | 22.9                       | 22.1               | 24.0 <sup>b</sup>  | •••                |
| Greece               |                    | 29.5               | 25 <b>.</b> 8              | 18.3               | <b>26.</b> 8       |                    |
| Hungary <sup>a</sup> | 36.3               | 22.4               | 19.8                       | 19.1 <sup>d</sup>  | 19.9°              |                    |
| Italy                | 32.6               | 23.7               | 23.4                       | 19.6               | 21.6               | 18.8               |
| Portugal             | 33.5               | 29.1               | 26.5                       | 24.6               | 25.3               | 24.2               |
| Romania*             | 40.1               | 33.4               | 29.6                       | 22.2               | 23.8 <sup>b</sup>  |                    |
| Spain <sup>c</sup>   | 33.7               | 27.5               | 19.8                       | 21.8               | 22.1               | 20.2               |
| Yugoslavia           | •••                | 32.0               | 26.9                       | •••                | 28.3               | 28.6               |

<sup>\*</sup> Territory at date given.

# Factors affecting differential birth rates<sup>10</sup>

The low birth rates which prevail in certain regions of the world and the historical decline of the rates in these countries, as indicated above, are closely related to the social and economic effects of modern industrialization and urbanization. In all countries where birth rates have fallen rapidly during modern times, the fall has been associated with a large-scale shift of population from agriculture to other types of employment, and from the countryside to cities. Industrializarise in 1942, earlier than in other countries of this group, because hostilities ended in Spain in 1939.

tion and urbanization, as they have developed in the industrial nations of Europe and North America, have been accompanied by important changes in the people's outlook on life.

There is abundant statistical evidence to show not only that human fertility in predominantly agricultural countries is higher than that in the urbanized ones, but also that there is an analogous difference between urban and rural areas within the same countries.11 Various

<sup>\*</sup> Territory as of date.

<sup>&</sup>lt;sup>1</sup> 1937-38 average. g Registration area only.

h 1911-13 average.
Lexcluding aborigines.

**b** 1947 only.

Spain is included here, although the birth rate started to

<sup>10</sup> Conclusions presented in this subsection are based on sources quoted or summarized in Findings of Studies on the Relationship between Population Trends and Economic and Social Factors, United Nations document E/CN.9/55, and in Economic and Social Factors Affecting Fertility, United Nations document E/CN.9/82.

<sup>&</sup>lt;sup>d</sup> 1942-43 average.

<sup>° 1947-48</sup> average.

<sup>11</sup> Crude birth rates for urban and rural areas may not always give this impression, owing to the fact that towns may have a higher proportion of women in the child-bearing age groups. Births in city hospitals to women whose residence is in rural areas may also distort the statistics. When account is taken of these factors, it is obvious in most cases that fertility is higher in the countryside.

explanations have been offered, such as a higher percentage, in the urban population, of occupational and income groups having lower birth rates; the economic disadvantages of having a large family in cities, as against the advantages of additional manpower provided, under certain conditions, by a greater number of children in rural areas; <sup>12</sup> the greater knowledge and availability of contraceptive devices in cities. Much importance has been attached also to the relatively greater independence of women and their increasing employment outside the home, which are characteristic of urban society in many parts of the world. The higher educational levels prevailing in cities and the greater status and prestige associated with heading a large family in rural societies are other possible explanations.

The difference in fertility between urban and rural areas is usually measured by comparing sizes of families. Thus, "in 1940, in the United States the average family size for ever-married women<sup>13</sup> aged 45-49 and resident on farms was 4.1. The corresponding figure for the group 'rural-non-farm' was 3.2 and for urban women 2.4".14 "In Switzerland, at the census of 1941, it was found that, in towns, 76 per cent of marriages which had existed for 20-24 years had less than three children and only 2.5 per cent had six or more. The corresponding figures for the country were 46 per cent and 16 per cent".15 "In Puerto Rico, in 1940, there were 773 children under five years of age for every thousand married women 15 to 44 years of age in the rural population, but the ratio was only 441 in urban areas".16 Similar observations have been made in Germany, Japan, Ceylon and many other countries. In general, it has also been observed that the larger the town, the lower the fertility of its inhabitants.

Wherever observed, the urban-rural differential in birth rates had a tendency to grow until the third decade of the twentieth century. There is limited evidence suggesting that, since then, it has been decreasing in those countries where the urban-type population has expanded into suburbs outside of the cities proper, and where the mechanization of agriculture and the extension of education and communications have narrowed the gap between country and city.

Studies of occupational differences in birth rates, made at various times in Canada, France, Germany, the United Kingdom and the United States, have shown

that the highest fertility was among manual workers engaged in agriculture, forestry, fishery and mining. Manual workers employed in manufacturing industries and handicrafts had lower fertility, while businessmen, professional personnel and clerical workers ranked at the bottom of the fertility scale. In occupational groups within which a fairly wide range of income exists, such as industrial workers, government employees, professional and business people, fertility has been found to be less among those with higher than among those with lower incomes. It is important, however, to note that recently the opposite relationship has been found in France, Norway, Sweden and the United States among white-collar workers with incomes above a certain level—that is, above a certain level, still greater income was associated with higher birth rates. Studies of fertility in relation to education of husband

Studies of fertility in relation to education of husband and wife have shown that, on the average, the higher the level of schooling attained, the fewer the children. Particularly low fertility has been found to be characteristic of college or university graduates.<sup>17</sup>

Large differentials have often been observed in the fertility of different religious groups, but the meaning of religious differences as the basis of fertility differentials is not always clear, as they frequently coincide with differences in urban-rural distribution, educational level and occupational characteristics. Fertility differentials between races have also been observed within a number of countries. Thus, in the United States, the average birth rate of the white population in 1941-45 was 19.5, while that of the non-white—predominantly Negro—population was 23.4. In New Zealand, in the same period of time, the average birth rate of the white population was 21.8, while that of the Maoris, averaging 45.4, was more than twice as high. Most separate racial groups have differing urban-rural distributions, occupations, etc., which probably account, at least in large part, for existing fertility differentials.

## MORTALITY

As indicated above, death statistics are subject to limitations similar to those of birth statistics (see p. 6). It is known, however, that not all of these factors affect birth and death rates to the same extent. Because of the legal consequences of death and of ceremonial considerations that frequently lead to registration, under-registration in some countries affects officially-reported death rates less than birth rates. In other countries, deaths may be subject to a greater degree of under-registration owing to the fact that birth documents are required by individuals for many legal and administrative matters, whereas death certificates are less frequently needed.

The United Nations Secretariat has prepared estimates of crude death rates (the number of deaths during a calendar year per 1,000 persons in the mid-year population of a given area) for the various regions of the world, around 1947, as follows:

<sup>12</sup> Some observations point to the conclusion that the decline of the urban birth rate quickened after the enactment of various legislative measures against child labour and the enforcement of legislation on compulsory education.

<sup>13 &</sup>quot;Ever-married women" are those who have been married, regardless of present marital status (married, widowed, or divorced).

<sup>&</sup>lt;sup>14</sup> United States Bureau of Census, Sixteenth Census of the United States—Population, "Differential Fertility, 1940 and 1910, Women by Number of Children Ever Born", Washington, 1945, table 10, as quoted in United Nations document E/CN.9/55, para. 127.

<sup>&</sup>lt;sup>15</sup> A. Landry, *Traité de démographie*, Paris, 1945, as quoted in United Nations document E/CN.9/82, para. 39.

<sup>&</sup>lt;sup>16</sup> Bartlett and Howell, The Population Problem of Puerto Rico, as summarized in United Nations document E/CN.9/82, para. 152.

<sup>&</sup>lt;sup>17</sup> See the studies cited in United Nations document E/CN.9/82, para. 54.

Estimated crude death rates around 1947 (by regions)

| Regions          | per 1000<br>population |
|------------------|------------------------|
| World            | 22 - 25                |
| Africa           |                        |
| America:         |                        |
| Northern America | . 10                   |
| Latin America    | 17                     |
| Asia             | 28 - 32                |
| Europe           | 13                     |
| Oceania          |                        |

\* The rates are based on weighted averages of the 1946-48 crude death rates for those countries for which data were available. For other regions and parts of regions, unofficial estimates and analyses, and in some cases data for neighbouring areas, were used. Census statistics on the age composition of the population were used in estimating levels of mortality for some countries. Non-quantitative information on health conditions was also utilized. For a fuller discussion of the methods used in preparing the regional estimates, see pages 13-14 of the English text of the Demographic Yearbook 1949-50.

The range of officially reported crude death rates for individual countries for recent postwar years is only from about 6 to 24 per 1,000 population. These limits are immediately suspect: the estimated rates for two major regions of the world are 25 or above, while rates as low as 6 are reported only for countries with incomplete registration or highly abnormal age structure of the population. Errors owing to under-registration are, in general, greatest where the true death rates are highest. Some countries which report death rates in the range of 20 to 25 probably have actual rates considerably above 30.

In Asia, where the average postwar death rate for the region as a whole has been estimated to be between 28 and 32 per 1,000 population, recorded national average death rates have ranged from 6 to 27 in recent years. The reporting countries have either atypical or unreliable data. The highest recently-reported death rate for any Asian country was that of French India (26.6 in 1948). The low rates of Japan (11 in 1950), Singapore (12.5 in 1947-49) and Ceylon (13.3 in 1947-49) are considered quite reliable, but other very low death rates reported for several Asian countries, particularly in the Middle East, appear to be understatements. India's reported death rate of 17.6 (1947-49) is also an underestimate. 18

The few areas of Africa for which reasonably complete data are available have death rates around or below 20 (Egypt: 20.3 in 1948, Algeria: 14.8 for Moslem population in 1949, Mauritius: 13.8 in 1950). In these countries, however, health standards are probably higher than in non-reporting countries; for this reason, they cannot be considered typical.

In Latin America and the Caribbean area, the averages of rates reported for individual countries in the years 1947-49 range from about 23 to 6 per 1,000. The accuracy of information, particularly from some of the countries listed at the lower end of the range, may be questioned. Argentina, with a death rate close to 9 in 1949, probably represents the lowest actual rate for major countries in this region. 19 Considerable discrepancies exist between reported death rates and informed estimates with regard to some countries: thus, according to a semi-official estimate, the Bolivian death rate for 1944 was 28.5, while the recorded rate for the same year stood at 14.8.20

In Europe, reported average death rates in individual countries during 1947-49 range from about 8 to nearly 14, with more than one-half of them clustering in the rather narrow range of from 10.5 to 13:

| Bulgaria* 13.4               | Spain 11.6             |
|------------------------------|------------------------|
| Portugal 13.4                | Finland 11.4           |
| Yugoslavia <sup>b</sup> 13.3 | Poland 11.4            |
| Ireland 13.2                 | Greece 10.8            |
| France 13.1                  | Italy 10.8             |
| Belgium 12.9                 | Switzerland 10.8       |
| Austria 12.7                 | Germany (Western) 10.7 |
| Luxembourg 12.3              | Saar 10.7              |
| Hungary <sup>e</sup> 12.1    | Sweden 9.9             |
| Malta and Gozo 11.9          | Denmark 9.1            |
| Czechoslovakia 11.8          | Norway 9.1             |
| United Kingdom 11.7          | Netherlands 7.9        |

The general level of these death rates is influenced by the relatively high proportion of aged persons in the population of many of these countries, which tends to raise the death rate even though health conditions are good. The exceptionally low rate for the Netherlands is explained partly by the fact that in that country the proportion of aged population is not very high.

Low death rates similar to those prevailing in Europe are reported in Northern America and Oceania (1947-49 averages):

| United States                       | 9.9 |
|-------------------------------------|-----|
| Australia (exclusive of aborigines) | 9.7 |
| Canada                              | 9.3 |
| New Zealand (exclusive of Maoris)   | 9.2 |

In summary, it may be stated, on the basis of the regional estimates of death rates and the recorded rates for individual countries, that the degree of economic development achieved by individual countries is less closely related to the death rates which they report than to their reported birth rates. While, on the one hand, the evidence shows that the highest death rates are reported by countries whose levels of industrial development are rather low, it also indicates that, on the other hand, several industrialized European countries (e.g., France and Belgium), because of the higher percentage of aged persons in their populations, have death rates above those of some less-developed countries.

<sup>18</sup> Because this figure relates only to the so-called "registration area" and is furthermore influenced by a considerable under-registration factor, the actual death rate for all of India is usually estimated to be much higher. An estimate of the actual average death rate in the 1931-41 intercensal period was 36; the present rate may be somewhat lower. See Findings of Studies on the Relationship between Population Trends and Economic and Social Factors, "Historical Outline of World Population Growth", United Nations document E/CN.9/89, para, 59.

<sup>&</sup>lt;sup>a</sup> 1947 only. <sup>b</sup> 1948-1949 average.

c 1947-48 average.

<sup>&</sup>lt;sup>19</sup> The rates for the Panama Canal Zone, which ranged between 5.1 and 8.6 during 1930-50, are affected by a very high proportion of population in the young adult age group.

<sup>&</sup>lt;sup>20</sup> Cf. Dr. R. Passmore, Nutrition and Health of Children in Five Countries of South America, United Nations document E/ICEF/83, summarizing Epidemiologia Boliviana by Dr. Juan Balcazar, former Professor of Hygiene at the University of La Paz and former Minister of Health of Bolivia.

# Trend of crude death rates

In general, reported death rates have been declining, for longer or shorter periods, all over the world. In the many areas not reporting death rates, there has presumably also been at least some decline, because of fewer famines and fewer widespread epidemics in the last several decades; but the decline has probably been of a limited nature as yet for most of those areas.

A dramatic reduction in death rates has recently

taken place in a number of reporting countries located in Latin America and the Caribbean area, in Asia and parts of Africa — countries which had death rates above 20, or close to that figure, as late as around 1930. Most have declined by approximately 30 per cent; a similar reduction has taken place in Egypt, the only African country for which adequate data are available. Some, like Puerto Rico, show reductions up to 50 per cent. The rapid decline of mortality is probably not yet completed in many countries of this type:

|                                  | 1932-34<br>everage | 1937-39<br>everege | 1942-44<br>everage | 1947-49<br>average | 1950-51<br>everage |
|----------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Asia                             | ever eye           | ever eye           | <b>B</b> VET GUE   | docrays            | worrage            |
| Ceylon                           | 21.5               | 21.5               | 20.4               | 13.4               | 12.1               |
| Japan                            | 17.8               | 17.5               | 16.5               | 12.7               | 10.4               |
| Federation of Malaya             | 21.6               | 20.1               | •••                | 16.6               | 15.6               |
| Singapore                        | 22.3               | 20.9               | •••                | 12.5               | 12.0               |
| Latin America and Caribbean Area |                    |                    |                    |                    |                    |
| British Guiana                   | 23.6               | 22.7               | 21.7               | 14.3               | 14.4               |
| Chile                            | 25.2               | 23.3               | 19.9               | 17.4               | 15.7               |
| Costa Rica                       | 21.0               | 18.7               | 18.8               | 13.6               | 12.0               |
| El Salvador                      | 25.3°              | 19.7               | 21.7               | 16.5               | 14.7               |
| Jamaica                          | 18.1               | 15.8               | 14.5               | 13.2               | 12.0               |
| Mexico                           | 25.2               | 23.4               | 21.9               | 17.0               | 16.7               |
| Puerto Rico                      | 21.1               | 19.1               | 15.1               | 11.6               | 9.9                |
| Trinidad and Tobago              | 18.4               | 16.5               | 16.4               | 12.7               | 12.1               |
| Africa                           |                    |                    |                    |                    |                    |
| Egypt                            | 28.0               | 26.4               | 27.3               | 20.8               |                    |
| Mauritius                        | 28.0               | 28.2               | 27.0               | 20.3               | 14.4               |

<sup>1934</sup> only.

Some of the other countries in the same regions, for which reliable older figures are missing, appear also to be in the same process of rapid death rate decline, others perhaps on the verge of decline. The application to these less-developed areas of modern methods of disease control (DDT, chlorination of water, antibiotics, etc.) as well as national and international action against famine, permits rapid reductions in mortality. As mortality from diseases amenable to methods of mass control is cut down, more people survive to the advanced age groups and the percentage of deaths from degenerative diseases (e.g., diseases of the heart and circulatory system, cancers and tumours) shows a marked increase (see following chapter on "Health Conditions").

In those parts of Europe and North America where an earlier technological development had taken place, affecting food production and distribution as well as public health measures and disease control, the drastic decline of death rates occurred earlier-in the late nineteenth or early twentieth century. After 1930, mortality continued to decline but at a slower rate.

| Country                     | 1901-03ª<br>average | 1932-34<br>average | 1937-39<br>average | 1942-44<br>average | 1947-49<br>average | 1950-51<br>average |
|-----------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Belgium                     | 17.2                | 13.0               | 13.5               | 14.8 <sup>b</sup>  | 12.9               | 12.6               |
| Denmark                     | 15.0                | 10.6               | 10.4               | 9.8                | 9.1                | 9.0                |
| Finland                     | 18.9                | 13.3               | 13.0               | 15.5°              | 11.4               | 10.0               |
| France                      | 19.6                | <b>15</b> .8       | 15.5               | 17.6°              | 13.1               | 12.9               |
| Ireland <sup>e</sup>        | 17.1                | 13.8               | 14.3               | 14.7               | 13.2               | 13.5               |
| Italy                       | 22.2                | 13.9               | 13.9               | 15.1 <sup>b</sup>  | 10.8               | 10.0               |
| Netherlands                 | 16.4                | 8.7                | 8.6                | 10.4 <sup>b</sup>  | 7.9                | 7.6                |
| Norway                      | 14.6                | 10.2               | 10.1               | 10.6               | 9.1                | 8.7                |
| Spain                       | 26.3                | 16.4               | 18.9°              | 13.8               | 11.6               | 11.2               |
| Sweden                      | 15.5                | 11.3               | 11.7               | 10.4               | 9.9                | 10.0               |
| Switzerland                 | 17.5                | 11.7               | 11.6               | 11.3               | 10.8               | 10.3               |
| United Kingdom <sup>d</sup> | 16.4                | 12.2               | 12.2               | 12.8               | 11.7               | 12.2               |
| United States               |                     | 10.9*              | 10.8               | 10.6               | 9.9                | 9.6                |

<sup>\*</sup> Calculated on the basis of tables published in Evolution of Mortality in Europe during the Twentieth Century, by Dr. M. Pascua, in the Epidemiological and Vital Statistics Report issued by the Epidemiological Information Service of the World Health Organization, vol. II, no. 4, April 1949.

Increased mortality due presumably to wartime conditions.

<sup>1950</sup> only.

<sup>&</sup>lt;sup>e</sup> Territory as of date.

<sup>&</sup>lt;sup>4</sup> Excluding deaths among armed forces outside the country and among US military personnel stationed in the United Kingdom.

Registration area only.

The same trend would probably be revealed in countries in Central Europe if comparable data were available.

In the early stages of industrialization, both in Europe and North America, the more congested and vulnerable city populations almost always had much higher death rates than the rural populations.<sup>21</sup> However, when the technological innovations and rising income levels associated with them brought about improvements in housing, health services, hospitals and medical research, etc., the influence of these innovations on death rates was felt at first primarily in urban areas; the provision of sanitation facilities and of systems for the purification of water supplies were of particular importance in this respect. The urban death rates, therefore, dropped more rapidly than did the rural rates; the difference between the two rates accordingly narrowed until, at present, it is no longer consistently in favour of the rural areas. (In those developed countries where the urban death rates are still higher than the rural, the fact that country dwellers often die in citieswhere hospitals are concentrated—may be a contributory factor.)

Where, as in the United Kingdom, mortality differentials by occupation have been explored, the highest death rate appears to be that prevailing among (male) unskilled labourers. The influence of occupational hazards on mortality is at present very limited, even in the case of persons engaged in the most dangerous trades—a circumstance corroborated by the fact that mortality differentials among the wives of the male members of the surveyed groups tend to follow those of the latter. It appears, therefore, that the mortality differentials among occupational groups are generally the result of differing conditions affecting the lives of the persons in various occupational categories, other than the actual work which they do. Income differences are clearly relevant in this connexion.

Conclusions from a very limited number of studies appear to demonstrate that an inverse relationship exists between income or wealth, on the one hand, and mortality on the other. These differentials have been explained by the inability of sick persons in low income groups to secure adequate medical care, to abstain from work for periods sufficiently long to permit complete recovery, and to attain satisfactory levels of living. Differences in death rates of different occupational and income groups have diminished as the general levels of income have risen and medical services have come within the reach of lower-income families or have been extended by public measures.

Mortality differentials among religious groups and among racial groups have also been observed in a number of countries. As in the case of birth rates, these differentials appear to reflect chiefly the divergent incomes, occupations and cultural characteristics of the groups concerned .

#### INFANT MORTALITY

Although infant mortality rates<sup>23</sup> are probably less accurate in general than over-all death rates-both because under-registration of infant deaths appears to be greater than for any other age group and because the rates are affected by errors in birth as well as death registration-nevertheless infant mortality rates provide a much better indicator of general levels of health and welfare than do the crude death rates. One reason for this is that the infant mortality rates are not distorted as are crude death rates by the fact that different populations have different age-compositions. (The specific death rates for other age-groups are likewise better indicators than crude death rates.) Furthermore, infant deaths are much more preventable than are deaths of elderly people, which can be postponed only a few years by the best of medical service; therefore, infant mortality rates are much more responsive to improvements in general conditions of health and welfare.

In general, countries that have high crude death rates have a large proportion of deaths contributed by infant mortality. For example, in Chile, with its relatively high death rate<sup>24</sup> of 17.4, infant deaths constitute 31.0 per cent of all deaths; similarly, in El Salvador, which has a death rate of 16.5, infant deaths account for 26.9 per cent of the total mortality. Conversely, where crude death rates are low, relatively few deaths are due to infant mortality: in New Zealand, where the death rate stands at 9.2, the percentage of infant deaths is only 6.6, and in the Netherlands, with its very low death rate of 7.9, infant deaths account for only 9.8 per cent of total mortality.

The relatively large number of infant deaths in countries of high general mortality is partly due, of course, to the fact that, in such countries, the percentage of children in the total population is usually quite high. But it is due even more to very high infant mortality rates prevailing in such countries.

Recently-reported infant mortality rates for different countries and territories have a remarkably wide range—from 20 to 199. At the upper end of the scale, furthermore, a considerable margin of uncertainty may be assumed. From many local areas of the world infant mortality rates up to 300—and occasionally even higher—have actually been reported for recent years.<sup>25</sup> The

<sup>&</sup>lt;sup>21</sup> Most conclusions presented in this and following paragraphs are based on sources quoted or summarized in Findings of Studies on the Relationships between Population Trends and Economic and Social Factors, United Nations document E/CN.9/55, and in Economic and Social Factors Affecting Mortality, United Nations document E/CN.9/73.

<sup>&</sup>lt;sup>22</sup> Age-specific death rates for women are, in all but a few age-brackets, generally lower than those for men.

<sup>&</sup>lt;sup>23</sup> The infant mortality rate is the number of deaths of children under one year of age in any calendar year per 1,000 live births. The accuracy of infant mortality rates may be affected by errors such as the inclusion of stillbirths or the exclusion from both the birth and infant death statistics of infants dying shortly after birth. In the computation of the infant mortality rates shown in this chapter and published in the *Demographic Yearbook* no adjustment was made to take account of the fact that some of the deaths during a given year are deaths of infants who were born during the preceding year. The rates are based on the births which occurred in the same calendar year as the deaths. However, unless birth numbers or infant death rates are changing rapidly, the error involved is not important.

<sup>&</sup>lt;sup>24</sup> All death rates given in this and the following paragraphs are 1947-49 averages.

<sup>&</sup>lt;sup>25</sup> Infant mortality rates reported for certain Brazilian cities for 1943 are as follows: Maceio, 422; Natal, 374; Aracaju, 353; Fortaleza, 377; Recife, 366.

Table II REPORTED INFANT MORTALITY RATES FOR SELECTED COUNTRIES<sup>a</sup>

|                                    | 1900-11<br>average | 1915-24<br>average | 1932-34<br>average         | 1937-39<br>average | 1942-44<br>average  | 1947-49<br>avera <b>g</b> e | 1950-51<br>average    |
|------------------------------------|--------------------|--------------------|----------------------------|--------------------|---------------------|-----------------------------|-----------------------|
| Africa                             |                    |                    |                            |                    |                     |                             |                       |
| Egypt<br>Mauritius                 | •••                | 194.6              | 167.3<br>140.1             | 163.4<br>158.1     | 160.3<br>148.7      | 133.6<br>130.4              | 79.9                  |
| Sierra Leone (Colony only)         | •••                | =                  | 233.0 <sup>b</sup><br>63.5 | 190.0°<br>52.6     | 45.8                | 177.1 <sup>d</sup><br>36.3  | 34.6                  |
| North America                      |                    |                    |                            |                    |                     |                             |                       |
| Canada                             | •••                | 104.2°             | 72.7<br>58.6°              | 66.6               | 54.0                | 44.0                        | <b>40.7</b> ° 28.9    |
| United States                      | • • •              | 86.8°<br>175.4     | 140.8                      | 51.2<br>122.8      | 40.2<br>96.8        | 31.8<br>86.5                | 79.8                  |
| Puerto Rico                        | •••                | •••                | 128.5                      | 123.8              | 99.7                | 72.6                        | 67.6                  |
| Trinidad and Tobago                | •••                | •••                | 122.6                      | 107.5              | 97.5                | <b>79.0</b>                 | 79.2                  |
| Latin America                      |                    |                    |                            |                    |                     |                             |                       |
| Argentina                          | • • •              | 123.2<br>265.9     | 92.8                       | 97.5               | 82.2                | 162 4                       | 150.0                 |
| Chile                              | • • •              | 185.4              | 251.6<br>151.5             | 233.6<br>136.1     | 189.8<br>137.6      | 163.4<br>100.4              | 150.8<br>88.7         |
| Mexico                             | •••                | 228.8°             | 135.7                      | 127.1              | 116.3               | 100.4                       | 97.1°                 |
| Uruguay                            |                    | 108.2              | 95.7                       | 92.4               | 78.7                |                             |                       |
| Venezuela                          | •••                | 154.8*             | 160.4°                     | 135.1              | 113.6               | 96.1                        | 80.9°                 |
| Asia                               |                    |                    |                            |                    |                     |                             |                       |
| Ceylon                             | 190.0              | 169.6              | 164.2                      | 161.8              | 129.2               | 93.3                        | 81.4                  |
| Cyprus                             | •••                | •••                | 139.1<br>160.3             | 129.2<br>143.1     | 129.1               | 68.0<br>90.8                | 62.0<br>101.6*        |
| Federation of Malaya Israel        | • • •              | •••                | 81.4                       | 56.6g              | 46.18               | 38.5₹                       | 42.6                  |
| Japan                              | 154.9              | 168.7              | 121.7                      | 109.3              | 86.4h               | 66.9                        | 58.6                  |
| Singapore                          | •••                | 257.8°             | 171.5                      | 148.2              | 159.5°              | 80.0                        | 78.6                  |
| Europe                             |                    |                    |                            |                    |                     |                             |                       |
| Belgium                            | 153.2°             | 117.1              | 89.4                       | 81.8               | 80.4                | 61.7                        | 53.4°                 |
| Bulgaria                           | • • •              | 147.6°             | 142.2                      | 144.4              | 127.1               | 129.51                      | 70.0                  |
| Czechoslovakia                     | 117.1              | 159.8°<br>88.0     | 125.5<br>68.1              | 108.2<br>61.0      | 109.5<br>46.5       | 84.9<br>36.7                | 78. <b>0°</b><br>29.8 |
| Denmark France                     | 149.2*             | 114.3              | 73.7                       | 64.8               | 74.7                | 58.1                        | 46.8                  |
| Hungary                            | •••                | 187.5°             | 155.9                      | 128.7              | 124.5*              | 101.1*                      | •••                   |
| Ireland                            | 93.2*              | 77.2               | 66.9                       | 68.5               | 77.2                | 57.1                        | 45.4                  |
| Italy                              | 163.3°<br>127.1°   | 144.0<br>80.7      | 103.1                      | 104.0              | 108.9               | 77.6                        | 65.6                  |
| Netherlands                        | 78.1°              | 58.9               | 44.3<br>44.6               | 36.1<br>38.8       | 42.0<br>36.0        | 29.9<br>30.6                | 25.9<br>28.2*         |
| Poland                             | ,0.1               | 30.7               | 137.6                      | 138.0°             | 30.0                | 109.1                       | 108.0°                |
| Portugal                           | 152.7°             | 160.5              | 146.3                      | 136.2              | 128.7               | 107.3                       | 91.6                  |
| Romania <sup>k</sup>               | 174.00             | 196.2°             | 180.2                      | 178.7              | 174.6               | 198.81                      | .::                   |
| Spain                              | 174.9°<br>86.9°    | 156.2<br>65.1      | 118.0<br>49.1              | 133.1<br>42.4      | 103.7<br>29.8       | 73.6                        | 68.7                  |
| Sweden                             | 128.6              | 76.8               | 48.2                       | 42.4<br>44.0       | 29.8<br><b>40.1</b> | 23.9<br>36.5                | 21.0<br>30.7          |
| United Kingdom (England and Wales) | 130.3°             | 86.8               | 62.4                       | 53.7               | 47.6                | 36.3                        | 31.21                 |
| Oceania                            |                    |                    |                            |                    |                     |                             |                       |
| Australia <sup>n</sup>             | 71.8 <sup>m</sup>  | 48.0               | 41.5                       | 38.2               | 35.7                | 27.2                        | 24.8                  |
| Hawaii                             | #2.0m              | 126.4°             | 74.5                       | 60.0               | 35.4                | 28.3                        | 23.3                  |
| New Zealand <sup>n</sup>           | 53.9 <sup>m</sup>  | 46.7               | 31.7                       | 32.7               | 30.1                | 23.6                        | 22.8                  |

<sup>\*</sup> Figures predating 1915 are, in the case of European countries, computed on the basis of tables published in Evolution of Mortality in Europe during the Twentieth Century, part II, by Dr. M. Pascua, in the Epidemiological and Vital Statistics Report of the World Health Organization, vol. III, no. 2-3, February-March, 1950; in the case of non-European countries, they are computed on the basis of data published in Summary of International Vital Statistics 1937-1944, appendix, released by the United States Health Service, Washington, D.C., 1947. Figures for the 1915-24 decade are quoted from United Nations, Foetal, Infant and Early Childhood Mortality, to be published during 1952 or early 1953. Various figures relating to Latin-American countries are calculated on the basis of data published in a series of Summaries of Biostatistics, prepared for individual Latin-American countries by the United States Department of Commerce, Bureau of Census, in cooperation with the Office of the Coordinator of Inter-American Affairs, Washington, D.C., in 1944 and 1945.

<sup>&</sup>lt;sup>b</sup> 1934 only.

c 1939 only.

<sup>&</sup>lt;sup>d</sup> 1948-49 average.

<sup>\*</sup> Figures do not cover the whole period.

Registration area only.

<sup>&</sup>lt;sup>8</sup> Refers to Jewish population of the Mandated Territory of Palestine.

Excluding war losses. 1942-43 average.

<sup>1947</sup> only.

<sup>&</sup>lt;sup>1</sup> Bydgoszcz, Gdansk and Poznan provinces only.

<sup>\*</sup> Figures refer to territory as of date.

Figure refers to total territory of the United Kingdom. m1912-14 average.

<sup>&</sup>quot; Excluding aborigines.

<sup>° 1933-34</sup> average.

p 1943-44 average.

<sup>&</sup>lt;sup>q</sup> 1937-38 average.

<sup>\* 1950</sup> only.

possibility that infant mortality rates of 400 for every 1,000 births exist in some remote areas should not be excluded.

The regions of lowest average infant mortality rates reported for major areas are the following:

| Region            | Average<br>infant<br>mortality<br>rate for<br>1947-49 | Range of reported<br>infant mortality rates<br>(latest available year) |
|-------------------|---|--|
| Oceania           | . 27  | 23 (New Zealand, excl. Maoris) to 102 (Cook Islands)                   |
| Northern America. | . 30  | 29 (United States) to 48<br>(Alaska)                                   |
| Europe            | . 88  | 20 (Sweden) to 199 (Romania)   |

In Latin America and the Caribbean islands, national infant mortality rates reported from major countries and areas for the latest years vary from 50 to 170. It appears, however, that actual infant mortality rates are much higher in at least some of the countries within that region. Thus, while the officially-reported infant mortality rates for Bolivia vary, in relatively recent years, between 113 and 133, a semi-official estimate places it (for 1944) at 289.26 The officially-reported infant mortality rates for Chile—which, within the 1939 to 1949 decennium, have varied between 225 and 161—and those for the urban population of Brazil, which have varied between 180 and 200,27 are probably close to actual levels.

Data on infant mortality in Africa and Asia, except for a few areas, are limited both in quantity and in quality. A reasonable estimate of average infant mortality rates for these regions can hardly be made, though it can be said that they are undoubtedly high. The highest single infant mortality rate recently recorded in the regions under discussion is that of the city of Saigon in Vietnam, where, in 1947, it was 353.28 While, on the one hand, it is very likely that the infant mortality rate has declined in Saigon since 1947, on the other hand, the existence of even higher rates elsewhere in the region is quite possible. Israel, with a rate of 39.4 in 1951, is at the lower end of the scale for the Asiatic continent.

A comparison of reported infant mortality rates, which are given in table II, with reported crude death rates, leads to the following observations:

- (a) The absolute range of infant mortality rates, even if only officially-reported national averages are considered, is very much wider than that of crude death rates.
- (b) In both cases, countries having achieved high standards of living have low rates. However, while a number of highly industrialized countries of Western Europe have crude death rates which are considerably

higher than those prevailing in certain other, comparatively less-developed countries, the position of these highly developed countries is closer to the lower end of the infant mortality scale.

The close connexion between levels of living and infant mortality rates appears to be further established by certain studies carried out within countries, such as the United Kingdom and the United States, where the existence of an inverse relationship between infant mortality rates and the economic status of the parents has been demonstrated.

# Trends of infant mortality rates

In table II, which indicates the trends of reported infant mortality rates in various countries, figures relating to the twentieth century are given. For European countries, figures are given for every decade since 1900; figures for non-European countries are given as available.

Table II presents a picture of uninterrupted decline of infant mortality rates for most—but not all—of the countries with available data. While the absolute figures may often be unreliable, the general downward trend seems indisputable.

The greatest progress has been achieved in curbing infant mortality after the first month of life. Deaths occurring during the first month, usually referred to as "neonatal" deaths, are more difficult to control since they are largely the result of causes which began in the prenatal stage or of injuries suffered during birth.

Interruptions of the downward trend of infant mortality rates in particular countries can, in most cases, be attributed to the fact that these countries were, as belligerents, exposed to hostilities and food shortages; some apparent increases in infant mortality rates, particularly in Latin-American countries, are probably the result of improved registration.

Considering the high responsiveness of infant mortality rates to improvements in environmental and social conditions, their historical decline is an easily recognizable consequence of advances in the field of public health and infant care. The fact that the decline of infant mortality rates continued without interruption during the depression years appears to indicate that deteriorating economic conditions do not necessarily result in increased infant mortality rates, at least not in countries where advanced standards of public health services have been achieved.

#### EXPECTATION OF LIFE

The decline in mortality which has taken place in most parts of the world is dramatically revealed in statistics on the expectation of life at birth and at later ages. Unfortunately, statistics on life expectancy cannot be computed for many countries, owing to the absence of age-specific death rates.<sup>29</sup> They are available, however, for almost all European and Northern American countries and for the main countries of Oceania. Latin

<sup>&</sup>lt;sup>26</sup> See Dr. Juan Balcazar, Epidemiologia Boliviana, as summarized in Nutrition and Health of Children in Five Countries of South America, United Nations document E/ICEF/83, p. 33.

<sup>&</sup>lt;sup>27</sup> United States Department of Commerce, Bureau of Census, *Brazil—Summary of Biostatistics*, Washington, D. C., 1945.

<sup>&</sup>lt;sup>28</sup> See UNICEF, Report of the Survey Mission to the Far East (other than China), United Nations document E/ICEF/72, annex B/5.

<sup>&</sup>lt;sup>29</sup> For a more comprehensive discussion of the problem of life-expectancy figures, including problems of their reliability, see *Demographic Yearbook*, 1948, pp. 29-30 of English text.

America is represented by a group of countries reporting life-expectancy figures which frequently are not national averages, but relate to urban areas only. Asia is represented by more or less obsolete data for three countries, Africa by data for Egypt and for the European and Coloured (but not the African) populations of the Union of South Africa.

In table III below, available life-expectancy figures are presented by consecutive decades, starting with the 1920-30 decade; for a few countries, figures going back to 1900 are given. (The figures are not strictly comparable between countries, as different years within the same decade have been used by various countries as years of reference.) In the case of the United States of America and of the Union of South Africa, where life-expectancy figures for different racial groups are

separately computed and vary significantly, separate figures are given for each major group.<sup>30</sup>

Whatever the deficiencies of the data in the table, the contrasts between the life expectancies in countries enjoying high all-around levels of living—and located chiefly in Western and Northern Europe, in Northern America and in Oceania—and those prevailing in other countries, are clear and striking.

<sup>30</sup> Because of the almost universally lower age-specific death rates for women, the life expectancy of women having reached a particular age is usually greater than that of men in the same age group. The relative size of the difference varies from country to country, but is usually greater in countries where life expectancies are higher. In table III, the average of male and female life expectancies is used in order to enhance comparability with figures reported from countries which do not separate life expectancies by sex.

Table III

LIFE EXPECTANCY AT BIRTH—SPECIFIC PERIODS: 1900-1950<sup>a</sup>

|  | Around<br>1910 | 1920-<br>1930 | 1930-<br>1940 | <b>1940-</b><br>1950 |   | Around<br>1910       | 1920-<br>1930        | 1930-<br>1940     | 1940-<br>1950         |
|--|----------------|---------------|---------------|----------------------|---|----------------------|----------------------|-------------------|-----------------------|
| Africa   |                |               |               |                      | Thailand(1937-38)                                       |                      |                      | 40.0¹             |                       |
| Egypt(1917-27) (1936-38)   |                | 33.5          | 38.6          |                      | (1947-48)<br>Europe                                     |                      |                      | 1                 | 50.3                  |
| Mauritius(1942-46)   |                |               |               | 33.0                 | Austria(1901-05)<br>(1930-33)                           | 40.11                |                      | 56.5              |                       |
| Union of South Africa:<br>Europeans(1925-27)<br>(1935-37)<br>(1945-47)         |                | <b>59.6</b>   | 61.0          | 66.0                 | Belgium(1891-1900<br>(1928-32)<br>(1946-49)             | ) 47.1               | 57.9                 |                   | 64.7                  |
| Northern America   |                |               | (1.1          |                      | Bulgaria(1899-1902<br>(1925-28)                         | 2) 40.2              | 46.3 <sup>1</sup>    |                   |                       |
| Canada(1930-32)<br>(1947)<br>United States:                                    |                |               | 61.1          | 67.1                 | Czechoslovakia(1899-190)<br>(1929-32)                   | 2) 40.31             |                      | 53.6 <sup>1</sup> |                       |
| white(1900-02) <sup>b</sup> (1920-29) <sup>b</sup> (1930-39) (1949)            | 49.7           | 59.2          | 62.6          | 68.7                 | Denmark(1901-05)<br>(1926-30)<br>(1936-40)<br>(1946-50) | 54.51                | 61.8                 | 64.7              | 69.0                  |
| non-white(1920-29)<br>(1930-39)<br>(1949)<br>Latin America and                 |                | 47.4°         | 50.8          | 60.8                 | Finland(1901-10)<br>(1921-30)<br>(1931-40)              | 46.71                | 52.9                 | 57.0 <sup>m</sup> |                       |
| Caribbean Islands         Barbados       (1945-47)         Brazil       (1920) |                | 37.4ª         |               | 51.1                 | (1941-45) France(1898-190, (1920-23) (1933-38)          | 3) 47.0 <sup>j</sup> | 54.1                 | 58.8              | 57.9°                 |
| Chile(1930)<br>(1940)  |                |               | 36.6          | 38.9<br><b>46.3</b>  | (1946-49)<br>Germany(1910-11)                           | 49.0                 |                      |                   | 64.7                  |
| Colombia   |                | 40.7          |               | 40.3                 | (1924-26)<br>(1932-34)<br>Federal Republic (1946-47)    |                      | 57.4                 | 61.3              | 60.6                  |
| Guatemala*(1939-41)  Jamaica(1910-12)  | 40.2           |               |               | 36.5                 | Hungary(1941)   |                      |                      |                   | 56.6 <sup>3</sup>     |
| (1920-22)<br>(1945-47)   | 10.2           | 37.0          | 22.2          | 52.9                 | Ireland(1900-02)<br>(1925-27)<br>(1935-37)              | 49.5                 | 57.7                 | 58.9              |                       |
| Mexico(1930)<br>(1940)   |                |               | 33.3          | 38.9                 | (1940-42) Italy(1901-11)                                | 44.5                 |                      |                   | 60.0                  |
| Panama <sup>e</sup> (1941-43)<br>Peru (Lima)(1933-35)                          |                |               | 39.0          | 52.0                 | (1921-22)<br>(1930-32)                                  |                      | 50.0                 | 54.9              |                       |
| Trinidad and Tobago. (1900-03) (1920-22)                                       | 37.7           | 38.9          |               |                      | Luxembourg (1946-48)  Malta (1946)                      |                      |                      |                   | 63.7<br>5 <b>6</b> .7 |
| (1930-32)<br>(1945-47)<br>Asia   |                | 00.7          | 45.7          | 54.5                 | Netherlands(1900-09)<br>(1921-30)<br>(1931-40)          | 52.2                 | <b>6</b> 2. <b>7</b> | 66.4              | 30.7                  |
| India <sup>e</sup> (1891-1901)<br>(1921-31)                                    |                | 26.7          |               |                      | (1947-49)<br>Norway(1901/02-                            |                      |                      | 50.               | 70.5                  |
| Japan <sup>h</sup> (1899-1903)<br>(1926-30)<br>(1935-36)<br>(1949-50)          | 44.4           | 45.7          | 48.3          | 57.9                 | 1910/11)<br>(1921/22-<br>1930/31)<br>(1945-48)          | <b>5</b> 6.3         | 2.4                  |                   | 69.8                  |

Table III LIFE EXPECTANCY AT BIRTH-SPECIFIC PERIODS: 1900-1950 (cont'd)

|   | Around<br>1910    | 1920-<br>1930     | 1930-<br>1940             | 1940-<br>1950 | •  | Around<br>1910 | 1920-<br>1930 |
|---|-------------------|-------------------|---------------------------|---------------|--|----------------|---------------|
| Poland  | 55.8              |                   | 49.8 <sup>3</sup><br>50.3 | 50.7          | United Kingdom (England<br>and Wales)(1910-12)<br>(1920-22)<br>(1930-32)<br>(1950) | 53.4           | 57.6          |
| (1921-30)<br>(1931-40)<br>(1941-45)                 |                   | 62.1              | <b>64.</b> 9              | 68.4          | Oceania Australia <sup>n</sup> (1891-1900) (1920-22)                               | 52.9           | 61.2          |
| Switzerland(1901-10)<br>(1920-21)<br>(1933-37)      | 50.7              | 56.0              | 62.7                      |               | (1932-34)<br>(1946-48)<br>New Zealand  |                | 01.2          |
| (1939-44)<br>USSR (in Europe)(1896-97)<br>(1926-27) | 32.4 <sup>j</sup> | 44.4 <sup>1</sup> |                           | 64.8          | excl. Maoris (1901-05)<br>(1925-27)<br>(1934-38)                                   | 59.3           | 65.3          |

Source: Demographic Yearbook 1951; records in the Statis-Vital Statistics, 1937-44, United States Federal Security Agency, National Office of Vital Statistics, Washington, D.C.

\*Figures are arithmetic means of male and female life expectancies attended to the content of the property of the pro

unless otherwise stated.

Death registration states. e Negro population only.

<sup>a</sup> Federal district and 13 cities.

|  | Around<br>1910 | 1920-<br>1930 | 1930-<br>1940 | 1940-<br>1950 |
|--|----------------|---------------|---------------|---------------|
| United Kingdom (England<br>and Wales)(1910-12)<br>(1920-22)<br>(1930-32)<br>(1950) | 53.4           | 57.6          | 60.8          | 68.9          |
| Oceania  |                |               |               |               |
| Australia <sup>n</sup> (1891-1900)<br>(1920-22)<br>(1932-34)<br>(1946-48)          | 52.9           | 61.2          | 65.3          | 68.4          |
| New Zealand<br>excl. Maoris(1901-05)<br>(1925-27)<br>(1934-38)                     | 59.3           | 65.3          | 67.0          |               |

Department of Guatemala only.

\* Excluding tribal Indians.

<sup>e</sup> Pre-partition India, including Burma.

- h Territory as of period specified. Japanese nationals only.
- Bangkok municipal area.
- Territory of the time.
  Bohemia and Moravia-Silesia.
- Excluding South Jutland.
- <sup>m</sup> Excluding war losses.

  \* Excluding full-blooded aborigines.

## AGE COMPOSITION OF THE POPULATION

The age composition of the population—which may affect productivity and therefore welfare—is a result of the particular pattern of birth rates and of death rates that the country has experienced, along with influences from migration. The United Nations Secretariat has prepared estimates of the distribution of population within each of the major regions of the world according to three broad age groups: under 15 years of age, 15-59 years, and 60 years and over. In general, children under 15 and persons 60 and over may be considered to be more or less dependent from the point of view of national economy, while those between 15 and 60, for the most part, engage in gainful activities or home production of goods and services.31

Estimated percentages of population in three major age groups in various regions of the world, around 1947

|   | Estimated         | percentages of  | population           |
|---|-------------------|-----------------|----------------------|
|   | Under 15<br>years | 15-59<br>years  | 60 years<br>and over |
| World                                   | . 36              | 57              | 7                    |
| Africa                                  | . 40              | 55              | 5                    |
| America: Northern America Latin America | . 25              | 64              | 11                   |
| (and Caribbean islands)                 | . 40              | 55<br><b>55</b> | 5<br><b>5</b>        |
| Europe                                  |                   | 60<br><b>62</b> | 1 <b>0</b><br>10     |

<sup>\*</sup> In calculating the regional estimates, reliable age distribu-tions for individual countries for recent years were used where available. For some areas it was necessary to estimate the proportions under 15 years and 60 and over from various sources, sometimes by using information for certain smaller areas within the region in question, or by comparing relevant information for outside areas in a similar stage of demographic development.

In France and Belgium, at the dates of the latest estimates, children under 15 composed only 21 per cent of the total population. The percentage is not much higher in the other countries of Western and Northern Europe. In the USSR, however, which has the highest proportion of children of all European countries, the percentage was 36 according to the 1939 census. Some Latin-American and Asian populations—and probably African populations as well—are nearly half-composed of children under 15; 43.3 per cent in Korea, 43.0 per cent in the Philippines and 43.5 per cent in Guatemala, according to the latest censuses. Thus, the proportion of children in such countries is twice as high as in Western Europe.

The two countries which have the lowest proportion of children, namely, France and Belgium, also have the highest percentage of aged persons in their populations. In Belgium nearly 16 per cent of the population in 1950 was at least 60 years old; the corresponding percentage for France in 1950 was even higher and stood at 16.6. In contrast, very low percentages of aged persons are reported in such countries as India (4.1 per cent in 1931), Brazil (4.2 in 1940), Venezuela (4.4 in 1941).

Of the factors determining the age composition of a country's population, fertility is the most important. High birth rates tend to produce a young population—

<sup>31</sup> In many countries a considerable number of children enter gainful employment before the age of 15, but their productivity is seldom equal to that of adult workers, and full-time employment before that age entails a sacrifice of educational standards. On the other hand, while in many countries it is customary for persons above 60 years of age to continue working, their productivity declines sharply, in many types of employment, as their age advances beyond that point.

that is, one with a large proportion of children; on the other hand, low birth rates, and especially declining birth rates, tend to produce a population with a high proportion of adults, and eventually of aged persons.

A high percentage of children in the total population, together with a high infant and child mortality rate, has sometimes been interpreted as one of the obstacles to economic development in countries where this situation obtains. In such countries there are relatively fewer adults to man whatever productive equipment exists and thus to contribute to national income. Those who work have less opportunity to create an economic surplus that might be used for investment and for increased productivity, because they must provide for their numerous dependants; and a very large percentage of the children thus supported die before they reach productive adulthood, resulting in a grave loss to the family and the community, emotionally, economically and from every other point of view. The difficulties created for education are considered elsewhere.32

The more-developed countries, on the other hand, are faced with the social and economic implications of an aging population. It is possible that the levels of living in industrialized countries may be depressed as a result of the trend toward an older population, owing to such factors as the increasing burden of old age dependency, and the lessened efficiency and adaptability of the labour force as well as the reduction in its size. The effects of aging upon these factors, and on the patterns of consumption and saving have by no means been definitely established, although it is clear that the aging of the population has an important bearing on the needs for various kinds of social services, including social security provisions, health services, old age pensions, and the like (see chapters III, VII and VIII).

#### CURRENT POPULATION TRENDS

The world's population has been increasing almost continuously during the last three centuries. It appears that the rate of population growth has been substantially higher in the period since 1850 than in previous centuries, but the trends of increase have not been parallel in all parts of the world. During the latter part of the nineteenth century, the population of Europe grew rapidly and that of the Americas prodigiously while the Asian population increased more slowly, and the population of Africa apparently grew hardly at all. Since the beginning of the twentieth century, however, the rate of growth in Africa and Asia has become much faster.

World population growth has been particularly accelerated during recent decades. More and more countries have recently been brought into the orbit of mortality decrease, but without—as yet, at least—corresponding fertility decrease. At the present moment, "it must be recognized that mankind is... facing an extensive demographic process which may even surpass in importance the so-called 'demographic revolution' of the Western countries during the last hundred years". 33

#### Natural increase rates

The region having the highest average excess of births over deaths (rate of natural increase) in recent years has been Latin America (including the Caribbean islands). The over-all rate of natural increase there, between 1947 and 1949, was about 23 per 1,000 per annum, with a number of countries having rates as high as 30 per 1,000. Among the countries where maximum rates have recently been recorded are Costa Rica (35.0 per 1,000 in the 1950-1951 period), El Salvador (33.8 per 1,000 in 1950), and Venezuela (32.5 per 1,000 in 1950-1951). In Northern America and Oceania the average annual rate of natural increase was around 15 per 1,000 in the 1947-49 period; the rate was much lower in Europe where it averaged 9 per 1,000. Incomplete statistical coverage precludes the possibility of calculating accurate rates of natural population growth for the other regions; the United Nations estimates for Africa around 1947 showed a natural increase in the neighbourhood of 10 to 15 per 1,000 per annum, and for Asia a somewhat lower rate.

Expressed in absolute figures, the estimated yearly natural increase of the populations of the several regions, around 1947, would be as follows:

|                  | Millions |
|------------------|----------|
| World            | 26 to 32 |
| Africa           | 2.5 to 3 |
| America:         |          |
| Northern America |          |
| Latin America    |          |
| Asia             |          |
| Europe           |          |
| Oceania          | 0.2      |

Individual countries may be classified into three groups: (1) countries with moderate natural increase because of both high fertility and high mortality, (2) countries with a rapid natural increase because of high fertility and considerably lower mortality, and (3) countries with moderate natural increase because of low fertility and low mortality. A possible fourth combination, that of low fertility and high mortality, with a corresponding lack of natural increase—or even a decrease—appears occasionally under special circumstances.

Inasmuch as both birth and death rates of different countries, if listed in descending order, present a continuum, the classification of a specific country with one or another group depends, to a considerable extent, on the arbitrary selection of the dividing lines. That is, the groups of countries with differing combinations of birth and death rates do not represent rigidly separate classes. Individual countries may, under specific circumstances, move from one of these groups to another. During modern times many countries have moved from the first through the second to the third group.

# Areas of moderate increase: high fertility and high mortality

Most of the principal countries of Asia and Africa probably belong to the first group. Birth rates have shown little if any evidence of decline in such countries, and death rates are also high, although some progress in controlling mortality has been achieved. Birth and death rates being relatively close to each other, rates of natural increase are low to moderate, generally not

<sup>&</sup>lt;sup>32</sup> See p. 62.

<sup>33</sup> Population Problems, "Study on the Influence which Changes in Mortality have had on the Growth of Populations in the World", WHO document EB.9/69, p. 3.

exceeding 10 to 15 per 1,000. Official vital statistics are available for very few of the countries that probably belong to this demographic category, and most of the available data are usually considered to be understatements. In Africa, the Colony of Sierra Leone and the registration areas of the Gold Coast, with birth rates around 35 and death rates around 24, and, therefore, with rates of natural increase about 11 per 1,000, may be considered as relatively good examples of areas in this category. In Asia, India-with an annual rate of natural increase estimated at 10 per 1,000 or moreappears to be in the same category. In addition to the countries already named, it is likely that China, much of Southeast Asia and the Middle East, as well as most of Africa south of the Sahara, can similarly be classified with this group. In countries of this type, infant mortality rates are among the highest now encountered, and life expectancies are low. If the efforts toward reducing mortality in these areas are successful over a period of time, and if the expansion of food supplies and other necessities keeps pace with the growth of numbers, the absolute increase in population will be tremendous.

# Areas of rapid increase: high fertility and considerably lower mortality

Rapid increase of population is found in countries where death rates have been reduced to a greater or lesser extent while birth rates have continued on a high level or may even have expanded. These include practically all of the countries commonly described as economically underdeveloped that do not fall into the category mentioned above. Some examples are given below; the fact that the rates of natural increase are accelerating in these countries can readily be observed by comparing data, where available, for different periods of time:

|                                     | Year<br>(average) | Birth rates | Death<br>rates | Rates of natural increase |
|-------------------------------------|-------------------|-------------|----------------|---------------------------|
| Africa                              |                   |             |                |                           |
| Egypt                               | 1932-34           | 42.8        | 28.0           | 14.8                      |
|                                     | 1947-49           | 42.7        | 20.8           | 21.9                      |
| Mauritius                           | 1947-49           | 44.2        | 20.3           | 23.9                      |
|                                     | 1950-51           | 48.6        | 14.4           | 34.2                      |
| Asia                                |                   |             |                |                           |
| Ceylon                              | 1932-34           | 37.9        | 21.5           | 16.4                      |
|                                     | 1947-49           | 40.0        | 13.4           | 26.6                      |
|                                     | 1950-51           | 38.8        | 12.1           | 26.7                      |
| Federation of Malaya                | 1932-34           | 36.9        | 21.6           | 15.3                      |
|                                     | 1947-49           | 42.4        | 16.6           | 25.8                      |
|                                     | 1950-51           | 42.8        | 15.6           | 27.2                      |
| Latin America and<br>Caribbean Area |                   |             |                |                           |
| Costa Rica                          | 1932-34           | 44.4        | 21.0           | 23.4                      |
|                                     | 1947-49           | 43.8        | 13.6           | 30.2                      |
|                                     | 1950-51           | 47.0        | 12.0           | 35.0                      |
| El Salvador                         | 1947-49           | 46.0        | 16.5           | 29.5                      |
|                                     | 1950              | 48.5        | 14.7           | 33.8                      |
| Guatemala                           | 1932-34           | 48.3        | 27.2           | 21.1                      |
|                                     | 1947-49           | 51.9        | 23.3           | 28.6                      |
|                                     | 1950-51           | 50.4        | 20.6           | 29.8                      |
| Jamaica                             | 1932-34           | 32.6        | 18.1           | 14.5                      |
|                                     | 1947-49           | 31.8        | 13.2           | 18.6                      |
|                                     | 1950-51           | 33.5        | 12.0           | 21.5                      |

|                     | Year<br>(average) | Birth<br>rates | Death<br>rates | Rates of natural increase |
|---------------------|-------------------|----------------|----------------|---------------------------|
| Mexico              | 1932-34           | 43.3           | 25.2           | 18.1                      |
|                     | 1947-49           | 45.3           | 17.0           | 28.3                      |
|                     | 1950              | 45.7           | 16.7           | 29.0                      |
| Puerto Rico         | 1932-34           | 39.2           | 21.1           | 18.1                      |
|                     | 1947-49           | 40.7           | 11.6           | 29.1                      |
|                     | 1950-51           | 37.8           | 9.9            | 27.9                      |
| Trinidad and Tobago | 1947-49           | 38.8           | 12.7           | 26.1                      |
|                     | 1950-51           | 37.1           | 12.1           | 25.0                      |
| Venezuela           | 1947-49           | 39.8           | 12.8           | 27.0                      |
|                     | 1950-51           | 43.6           | 11.1           | 32.5                      |
| Europe              |                   |                |                |                           |
| Malta and Gozo      | 1932-34           | 33.2           | 21.3           | 11.9                      |
|                     | 1947-49           | 36.3           | 11.9           | 24.4                      |
|                     | 1950-51           | 31.6           | 10.7           | 20.9                      |

The range of the rates of natural increase reported in recent years for these countries is between 18 and 35, with about one-half of them having rates between 25 and 30. The populations with rates of natural increase between 25 and 30 would double in twenty-three to twenty-eight years, or would quadruple in half a century, if there were no emigration.<sup>34</sup> Many other countries where vital statistics are deficient or lacking might also be placed in this category if adequate information were available.

Some of the countries in this category have made extraordinary progress in cutting down their death rates during recent years (for example, Ceylon, Puerto Rico and Malta). Their intensive programmes of public health, if continued in the future, are likely to bring still lower death rates. The possibilities for further considerable reduction of mortality are most obvious in such countries as Mexico, where the death rates are still relatively high in spite of recent decreases. In countries like Japan, Ceylon, Costa Rica, Jamaica, Puerto Rico, Trinidad, Venezuela and Malta, where the crude death rates are now much lower, there is, of course, less room for further drastic reductions, but possibilities for quite substantial decreases remain. With their present relatively youthful age structure of population, these countries could achieve crude death rates below those of some of the most advanced countries of Europe, if they reached a comparable level of health.

In general, the birth rates recorded in the countries under consideration have not declined, even where the greatest drops in the death rates have been observed. It is this situation which accounts for the rapid population growth which they are now experiencing. The present gap between the birth and death rates makes the continuation of rapid growth seem almost inevitable in these parts of the world, at least for some time in the future—subject only to the possibility of natural or man-made calamities. In time, however, it is possible that the adoption of family planning on a large scale may bring down their birth rates and narrow the gap between fertility and mortality.

<sup>&</sup>lt;sup>34</sup> In some areas having natural increase rates above 25 and 30 per 1,000, such as Puerto Rico and the Federation of Malaya, actual population increases in the 1940-50 intercensal period were less than the ones indicated on the basis of natural increase rates. Migration appears to be the explanation of the differences.

# Areas of moderate increase: low fertility and low mortality

The countries where both fertility and mortality rates are now relatively low, and where the gap between them is narrow or only moderately wide, are, for the most part, those which have attained a comparatively high level of economic development, and in which urbanization is well advanced and public health services are extensive. These countries are located chiefly in Europe, Northern America, and Oceania (see table IV).

Until a decade or two ago, declining or stationary rates of natural increase characterized practically all the industrially highly-developed countries of Western and Northern Europe and Northern America, as well as Australia and New Zealand. It is quite possible that they will revert to that situation in the future. But the upward swing of annual birth rates that began in the 1930's, as noted above, together with the continued decline of death rates, has resulted, at least temporarily, in accelerated growth of population in these areas. Relevant figures for representative countries in this category are given in table IV. The rates of natural increase for 1947-49 ranged from about 5 to 18 per 1,000; such a wide range reflects primarily the various levels reached by the increased birth rates since the early 1930's. It is too early to determine whether or not the decline of birth rates very recently resumed in the highly industrialized countries of Northern and Western Europe and of Northern America means a permanent return to that trend. It is possible that the decline will soon level off, and it is conceivable that the rates may follow a rising trend again in the future, though this seems unlikely. Possibilities for further decline in the death rates of most of these countries are limited; in fact, in many cases, the crude rate may tend to rise because of the increasing proportions of aged persons in the population, and in spite of further improvements in health conditions. It seems probable, therefore, that the rates of natural increase in these countries considered as a group, over a long period in the future, will not be greater than they have been in the recent past; they may be substantially less.

In the countries of Southern and Southeastern Europe, as already mentioned, the birth rates during the last two decades have generally continued their previous downward trend without the major interruption as noted elsewhere in Europe and in Northern America and Oceania. As a result, their rates of natural increase have remained stationary or declined somewhat in spite of substantial reductions of mortality during this period. In these countries taken as a group, birth rates are somewhat above the level typical of Northern and Western European countries, and this fact, together with their recent experience, suggests that some further decline may be in store. However, their death rates also appear capable of considerable reductions, when the age distribution of their populations is taken into consideration. Here, too, it seems likely that the rate of population growth will be moderate to low in the future.

Whatever the future trend of population growth may be in the economically more-advanced countries, it is

Table IV

NATURAL INCREASE IN DEVELOPED COUNTRIES

|                     | Year<br>(average)    | Birth<br>rates | Death<br>rates | Rates of natural increase |
|---------------------|----------------------|----------------|----------------|---------------------------|
| Europe              |                      |                |                |                           |
| Austria             |                      | 14.3           | 13.3           | 1.0                       |
|                     | 1947-49              | 17.6           | 12.7           | 4.9                       |
| Dulgaria            | 1950-51              | 15.1           | 12.6           | 2.5                       |
| Bulgaria            | . 1932-34<br>1947    | 30.3<br>24.0   | 15.3<br>13.4   | 15.0<br>10.6              |
| Czechoslovakia      |                      | 18.8           | 13.5           | 5.3                       |
|                     | 1947-49              | 23.2           | 11.8           | 11.4                      |
| Finland             |                      | 19.1           | 13.3           | 5.8                       |
|                     | 1947-49              | 27.2           | 11.4           | 15.8                      |
| France              | 1950-51<br>. 1932-34 | 23.6<br>16.8   | 10.0<br>15.8   | 13.6<br>1.0               |
| France              | 1932-34              | 21.1           | 13.8           | 8.0                       |
|                     | 1950-51              | 20.0           | 12.9           | 7.1                       |
| Hungary             |                      | 22.4           | 15.7           | 6.7                       |
|                     | 1947-48              | 19.9           | 12.1           | 7.8                       |
| Italy               | . 1932-34<br>1947-49 | 23.7<br>21.6   | 13.9<br>10.8   | 9.8<br>10.8               |
|                     | 1947-49              | 18.8           | 10.8           | 8.8                       |
| Netherlands         |                      | 21.1           | 8.7            | 12.4                      |
|                     | 1947-49              | 25.6           | 7.9            | 17.7                      |
|                     | 1950-51              | 22.5           | 7.6            | 14.9                      |
| Portugal            | . 1932-34<br>1947-49 | 29.1           | 16.9           | 12.2                      |
|                     | 1947-49              | 25.3<br>24.2   | 13.4<br>12.2   | 11.9<br>12. <b>0</b>      |
| Spain               |                      | 27.5           | 16.4           | 11.1                      |
| •                   | 1947-49              | 22.1           | 11.6           | 10.5                      |
|                     | 1950-51              | 20.2           | 11.2           | 9.0                       |
| Sweden              |                      | 14.0           | 11.3           | 2.7                       |
|                     | 1947-49<br>1950-51   | 18.3<br>16.0   | 9.9<br>10.0    | 8.4<br>6.0                |
| United Kingdom      | 1950-51              | 10.0           | 10.0           | 0.0                       |
| (England and Wales) |                      | 14.8           | 12. <b>0</b>   | 2.8                       |
|                     | 1947-49              | 18.3           | 11.5           | 6.8                       |
| Northern America    | 1950-51              | 15.7           | 12.0           | 3.7                       |
|                     | 1932-34              | 21.4           | 9.7            | 11.7                      |
| Canada              | 1932-34              | 27.6           | 9.7            | 11.7<br>18.3              |
|                     | 1950                 | 26.6           | 9.0            | 17.6                      |
| United States       |                      | 17.1           | 10.9           | 6.2                       |
|                     | 1947-49              | 24.7           | 9.9            | 14.8                      |
| Oceania             | 1950-51              | 24.0           | 9.6            | 14.4                      |
| Australia           | 1932-34              | 16.7           | 8.9            | 70                        |
| rusti alla          | 1932-34              | 23.4           | 8.9<br>9.7     | 7.8<br>13.7               |
|                     | 1950-51              | 23.1           | 9.6            | 13.5                      |
| New Zealand*        |                      | 16.8           | 8.2            | 8.6                       |
|                     | 1947-49              | 25.6           | 9.2            | 16.4                      |
|                     | 1950-5 <b>1</b>      | 24.5           | 9.4            | 15.1                      |

<sup>\*</sup> White population only.

possible that there will be rather wide, temporary departures, following fluctuations in economic and political circumstances such as those which have occurred during the last two decades.

# Conclusions: world population prospect

The present world population picture is one of rapid expansion. Over the last two decades, death rates have remained stationary or declined in all parts of the world where this trend is known, while birth rates have remained stationary or have risen (with certain exceptions, especially in Southern and Southeastern Europe).

The world's population, therefore, has recently been growing at an accelerating pace. How long the acceleration will continue it is impossible to predict. In the economically most-developed countries, the recent peak rate of increase has apparently been passed, and unless factors not now foreseen come into operation, future growth will probably be, at most, no greater than the present rate. But the economically less-developed countries which, because of their vast populations, will largely determine the general world picture of population change, present more imponderable elements. Their death rates are being radically reduced-and can be reduced much more in the future-by modern mass methods of disease control, such as the use of DDT. Some of these methods can be applied without the populations of the areas having to go through the general economic and social changes that were associated with the reduction of mortality in European countries in the past and, later, with the reduction of birth rates. The problem of supplying sufficient food for the rapidly increasing numbers is urgent and fundamental. If this problem is solved, it is possible that average death rates in the less-developed areas, taken as a group, may before long approach the levels now observed in highly industrialized societies, while fertility continues for some time to exhibit the traditional patterns of a pre-industrial society. With continuing economic development, urbanization and associated changes, birth rates may in time fall from their present high levels to a point commensurate with the reduced death rates, as has occurred in most of the countries that are now highly industrialized—although it is difficult to predict when this may occur. The reduction of birth rates in these countries may, perhaps, be hastened if the governments choose to encourage such a trend and find effective means of carrying out that policy.

But, in any case, the width of the gap that now exists between the birth and death rates of many underdeveloped areas makes it almost certain that rapid world population growth will, under present circumstances, continue at least for some decades in the future and this prospect must be taken into account in the formulation of social policy.

# Chapter III

# HEALTH CONDITIONS<sup>1</sup>

#### Introduction

Health is defined in the preamble to the Constitution of the World Health Organization as "a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity' and the Universal Declaration of Human Rights declares that "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care . . ." In these terms "health" is not just a medical matter; it is a social goal. It is a goal difficult to achieve because, while the community, if it makes the effort, can provide the means and services—public health measures, sanitation, better treatment of disease and fuller amenities—health, in the final analysis, depends also on the individual. In the following paragraphs, and indeed throughout this chapter, examples are given to illustrate this view. To cover the ground exhaustively is not possible and to attempt it would be confusing.

Nevertheless, the urge towards health is a powerful social force, compelling the raising of standards of living; producing demands for better food, better housing, better working conditions, and higher levels of education; and encouraging the development of resources to support these requirements.

The saying that the health of a people is the wealth of a people is not merely a pious aphorism. Certainly the converse is true, that a community burdened with ill-health is an impoverished community. There is a vicious circle: disease—under-production—poverty—poor health services—more disease, which is manifest in those underdeveloped countries where the majority of a people are afflicted with gross diseases which rob them of vitality and initiative and which create social lethargy. A peasant, sick of a fever at the critical periods of planting and harvesting, cannot grow enough food, or earn enough to buy it. Malnutrition, in turn, exposes him to infectious and other diseases. Not only are he and his family impoverished but all the standards of his community are degraded physically and in morale.

Medical services and medical advances are often pace-makers of social change. Penicillin (and the whole range of antibiotics which followed its discovery) and DDT (and the other insecticides) have already transformed the lives of millions, not only by benefiting the individual directly, but also by increasing the capacities and changing the attitudes of whole communities. Yaws, for example, afflicts so many tropical countries that a map of its incidence would mark most of the land area lying between the two tropics. It is a disease produced by a spirochaete, similar to that of syphilis. It is a crippling, disfiguring and debilitating disease which affects all ages, but it can be cured by one, two or at most three doses of penicillin. It has been particularly attacked in Thailand, Indonesia, Haiti and West Africa generally. In Indonesia, to take an illustra-

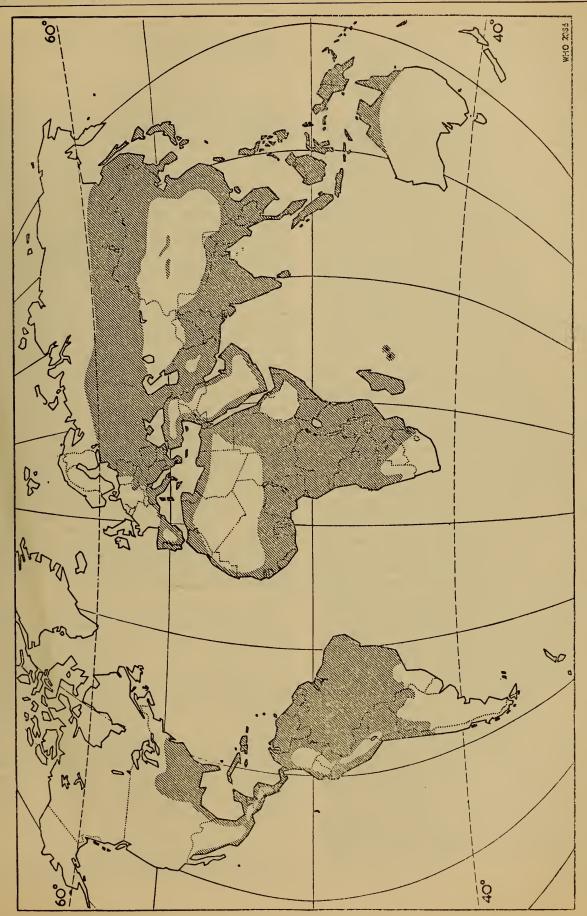
tion, where a mass-treatment campaign was undertaken by the Government in conjunction with WHO and UNICEF and where in the first two years (1950-51) over 300,000 victims were treated at a cost of about two dollars a head, the social effects in the villages involved are already visible. In contrast with yaws-afflicted villages, the houses are clean, the children well-cared for, and the crops and livestock have improved. Because the people have found a new zest, farmers' clubs and rural extension courses have made headway; the peasants want to learn modern ways of producing better rice and developing better irrigation. In one area they are building a sixty-mile canal to bring water to the hills for wet-rice cropping. They are constructing this canal with volunteer labour, with no equipment except picks, spades and baskets and their own new-found enthusiasm.

It is estimated that 300 million people in the world suffer from malaria. But Italy, Ceylon and Brazil, for example, have been virtually cleared of the disease by residual insecticides such as DDT. (Earlier, by a more difficult and expensive method, the mosquito vector was eradicated in Sardinia and Cyprus.) Malaria control schemes, with international help, have been started in the Dominican Republic, Haiti and Paraguay and parts of Brazil in the Americas; Vietnam, Cambodia, Sarawak, Philippines and Formosa in the Western Pacific; India, Burma and Indonesia in South and Southeast Asia; and Afghanistan, Iran, Lebanon, Iraq, Syria and Palestine in the Middle East. The effects are immeasurable and the secondary social consequences are as important as the direct results to health. The population picture is profoundly affected; more children are surviving infancy, to marry and to multiply, and the expectation of life is being increased. But, at the same time, the reduction of malaria and the destruction of mosquitoes are bringing abandoned acres back into cultivation and increasing the potential yields of existing acreages through double-cropping and more efficient labour.

One of the secondary social effects of health service is the effect of mother and child welfare services on the emancipation of women. In countries where segregation of women is an intransigent problem for political reformers, the functional activities of doctors, nurses and health visitors are establishing contacts with women and helping to create among them a new spirit of inquiry and co-operation.

The gap between advanced knowledge of modern medicine and its application is still wide. There are exceptions (notably in the case of penicillin and DDT which can be applied on a mass basis with great effect), but the refinements of clinical text-books and the pharmacopoeias are remote from practice in most of the world. Even if the doctors and experts were avail-

<sup>&</sup>lt;sup>1</sup> Prepared by the World Health Organization.



Approximate geographical distribution of malaria (shaded areas)

able (there are about 900,000 doctors in the world and twice as many are needed at present to meet elementary needs), advanced techniques could still be unreal and irrelevant in many cases—because the conditions of ill health which these techniques have been developed to remedy are not the urgent medical problems of underdeveloped areas.

All countries have subscribed to the principle of the right to health; most of them, however underdeveloped their economies and however limited their resources, are endeavouring to create the services and amenities of health. The dilemma is that no underdeveloped country can afford not to make this effort if it aims to develop its resources, yet few have the means adequate to do so until their resources are developed. What two-thirds of the nations of the world—the underdeveloped territories are attempting to do is telescope into a few years the work of a century. (For the public health movement, the recognition of health as a social responsibility and disease as an economic burden dates from about 1850.) Then, however, there was capital in the industrial countries to invest in health, and health came to be recognized as a profitable investment. The development in economically backward countries of adequate health services (and the consequent development of resources dependent on good health) was prevented by the fact that there was no surplus capital to invest. The same is relatively true today, although there is world recognition of the value of health services and the duty to provide them, and although some international help is available through the World Health Organization, the United Nations International Children's Emergency Fund, and bilateral programmes. A country can absorb assistance only to the extent of its capacity to "match" international contributions and to face the heavy continuing and expanding commitments. International help can demonstrate the practicality and benefits of health measures, but that is a limited operation which the governments are obliged by their agreements (or by popular pressure) to continue and extend through their own resources. Almost invariably, such commitments turn out to be heavier than foreseen. For instance, a government which invites international help in dealing with the obvious cases of tuberculosis is liable to find that a tuberculosis survey will reveal a much wider extent of the disease (e.g., the anti-tuberculosis campaign in India has shown that at least one million hospital beds would be necessary to deal with the active cases already disclosed). Beyond that, however, there are the secondary commitments—the need for housing, improvement in working conditions, schools and other amenities, which are discussed below.

Because in the highly-developed, high-income countries, health is a surcharge on an already established economy, the responsibility for it (excepting for the preventive measures necessary to protect the community at large) can more easily be regarded as the financial responsibilty of the individual than in the underdeveloped countries where the financial initiative has to lie with governments which must clear the undergrowth of mass diseases. Where there is a shortage of medical personnel, governments may (as in Pakistan) have to assume powers to mobilize doctors and direct them for a period of service in districts where they are most needed.

Some other questions that arise from the need to "telescope" the development of a health service are discussed in paragraphs below.

# THE RELEVANCE AND IRRELEVANCE OF HEALTH STATISTICS

When the ancient cartographers reached the limits of their known world and had only a vague idea of what lay beyond, they would sometimes draw a fire-breathing symbol and label the terrae incognitae, "Here be dragons". There are many such areas still on the world health map. That is to say, it is a matter of comparing the near-mythology of figures from medically underdeveloped countries with the scientific exactness of statistically advanced countries.

In 1951 the World Health Organization published a volume, part I of the *Epidemiological and Vital Statistics Report* for the years 1939 to 1946; this part deals with population and vital statistics; part II, containing corrected statistics, will be published early in 1952. The complete volume links up with the annual epidemiological reports issued by the Health Organization of the League of Nations, of which the last volume, for the year 1938, was published in 1941. How incomplete, and how unreliable for comparison, are these statistics is brought out in the numerous notes appended to the figures published in the Epidemiological and Vital Statistics Series.

Sometimes even approximations are unavailable. For instance, the detailed statistics in part I of the WHO volume are based on replies by member States to a questionnaire issued by the World Health Organization and the replies relate to only thirty-one countries with a total population of about 540 millions, roughly one-quarter of the world's population. That quarter represents the countries in which a health organization is sufficiently advanced to collect and arrange the information on causes of death and which co-operated with WHO in preparing this review. Even if figures had been available for all countries in which some information of this kind is collected, the fraction of the world's population represented would have been not more than half.

Detailed statistics, therefore, give information only about a selected and atypical fraction of the world population since they are derived mainly from the so-called "Western" countries, with complete census machinery, regular health returns, and the refinements of advanced statistical methods. Nevertheless, these detailed figures give some indications of the normal lines along which the health of countries tends toward improvement.

Moreover, the non-statistical information about other countries, however imperfect and generalized and misleading as to detail, can be sufficiently indicative to give a rough idea of the scope of the world health problem, and of the gross diseases afflicting a country or a region. That is where the main problem lies; and it is illustrated by the examples in the following paragraphs.

# MASS DISEASES

It may be a crude generalization to say that 300 million people in the world suffer from malaria and

Health Conditions 25

that 3 million a year die from it, but that gives the order of magnitude of the problem. Nor is it necessary (though desirable) to have detailed statistical verification to know that malaria is the major affliction of most countries (outside the medically developed countries of the temperate zone); that it is predominantly a rural disease and that, therefore, it is a disease with an important bearing on food production. The general prevalence of any disease in a country, as diagnosed by common experience and observation, is a passable substitute for statistics.

We can, therefore, accept, by report from most countries and by statistics from others, that there are "mass diseases". That is a term here used merely as a convenience to describe diseases which are so widespread, and affect so high a proportion of the population, as to be a dominant factor in hindering the social and economic development of a country, and which, medically, mask other diseases to the point of making them clinically irrelevant until the mass disease is removed.

The mass diseases by this definition may be regarded as the tangle, the jungle undergrowth, of disease which has to be cleared before a country has a fair chance of development. When it is cleared, other forms of illhealth reveal themselves, as they have done in the highly-developed countries.

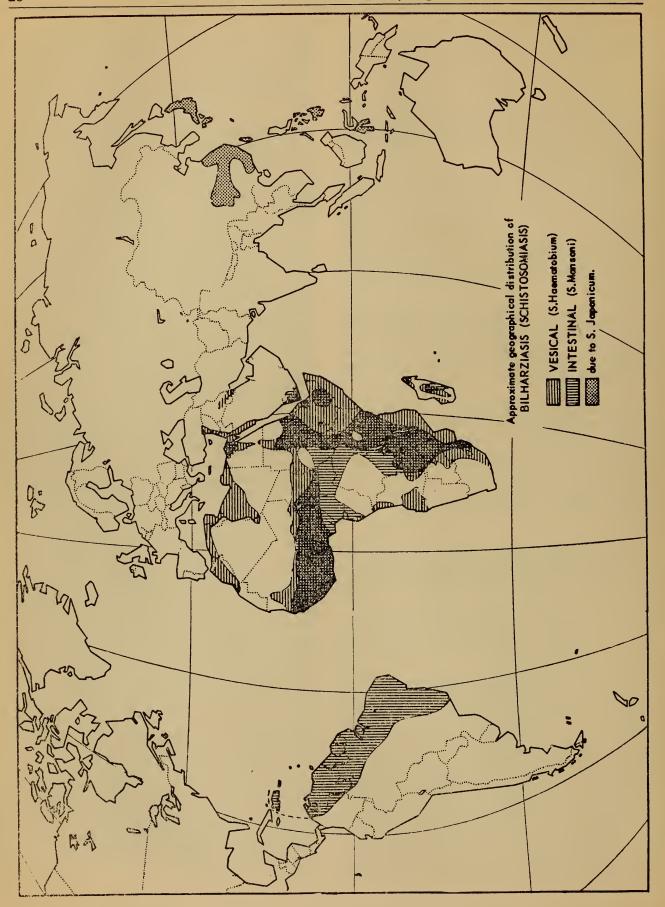
Mass diseases are: malaria, bilharziasis, yaws, hookworm, tuberculosis, trachoma, syphilis, gastro-intestinal diseases and nutritional diseases. Pestilential diseases—cholera, smallpox, bubonic plague, typhus, typhoid and yellow fever—would rank as "mass diseases" in epidemic form, since they would affect, kill or disable substantial proportions of the populations, but in endemic form they are localized and, in general, have been brought within the manageable limits of public health whereas the others, in underdeveloped countries, have not.

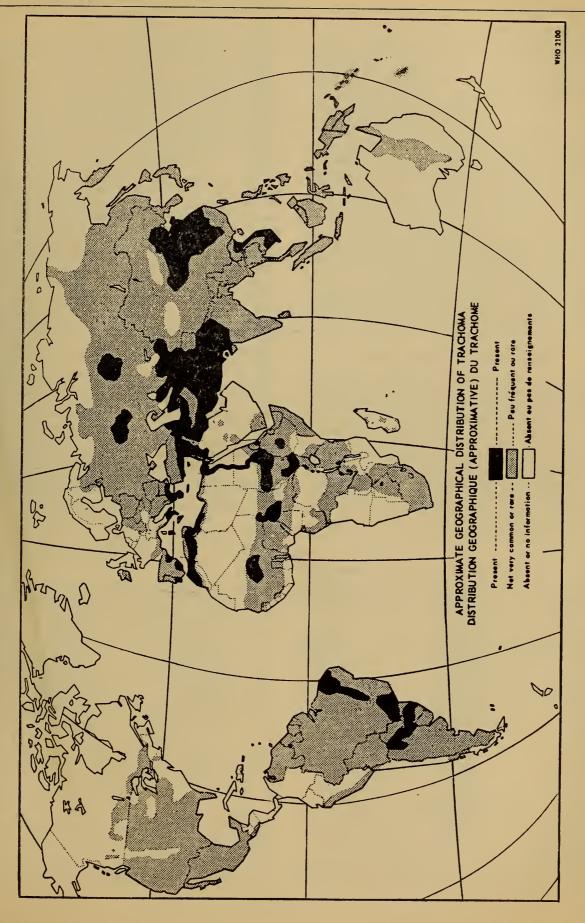
Malaria is almost certainly the mass disease which has the greatest effect on the greatest number of people. It is endemic in the wet tropics and was, until malaria control was instituted, a chronic problem in Mediterranean countries such as Italy, Greece and Cyprus, in the southern states of the United States, and elsewhere. It reaches its highest proportions in the densely populated, underdeveloped countries where, in some localities, e.g., Bengal, more than half the population are recurrently ill of the disease.

The tuberculosis death rate is probably higher than that of malaria and the disease is geographically more widespread, probably now universal. It is by no means confined to the underdeveloped countries. Indeed, urbanization and industrialization provide the closer association through which the disease spreads. Syphilis is also worldwide. Once it is introduced into an underdeveloped community, it often assumes extravagant proportions. In the Straits Settlements the rate of incidence was found in 1937 to be 494 per 100,000—thirty times that of England and seventy-five times that of Sweden. In the Ghund Valley (Simla, India) the whole population was clinically tested and showed 65 per cent positive cases. (In the WHO demonstration project here the disease was controlled by penicillin

injections within a few months and a later check showed no new cases). Bilharziasis is widely distributed in parts of Africa, the Middle East, South America and China. It is a disease transmitted by a water-snail and is spread through bathing in the rivers and working in the irrigated fields. It has been estimated that it costs Egypt approximately £E20 million per year and decreases productivity by 33 per cent. About 10 million people are infected in Egypt. Yaws, a spirochaetic disease which is not spread venereally but by spirochaetic invasion of wounds and sores, is scattered through countries in tropical latitudes. Hookworm, spread through polluted water supplies, is found in practically every underdeveloped country. Control of the disease in one large tea plantation in India increased labour efficiency by 25 per cent. Trachoma, the eye disease leading to blindness, is most common in the arid zone, but is also found in wet tropical areas (India and Indochina have a high incidence). In Egypt it is widespread in the rural population, though not generally in its extreme forms. Gastrointestinal diseases are due to many causes, but usually to unclean food or water. They are the cause of a high infant death rate and of general incapacity and deaths. Dysentery is the most common, but they include cholera and typhoid. Gastro-intestinal diseases are predominantly a problem of sanitation—and consequently expensive to control since sewers and clean water supplies mean heavy capital investment in public works.

Nutritional diseases—malnutrition short of starvation—derive from a complex of poverty and ignorance. In their clinical manifestations they are identifiable as beri-beri, pellagra, scurvy, rickets, a disease condition of increasing medical interest known as kwashiorkor and nutritional anaemia. But deficiencies in diet are a matter of degree and the individuals who end in hospitals, mental institutions or the grave as a result of text-book deficiency diseases are only a fraction of those who endure through life the miseries and disabilities of sub-normal health due to such deficiencies. For example, kwashiorkor is a disease manifested in children between the ages of 6 months and 6 years. It is characterized by a change in the pigmentation—a reddening or "rusting" of the hair and the skin—by retarded growth, fatty infiltration, the swollen stomach of oedema, cirrhosis of the liver and heavy mortality. The manifestations occur in populations where the child during the weaning and post-weaning period is put on to a diet deficient in animal and first-class protein. If he survives—and it is said that in many parts of Central Africa most children in the second or third year of life suffer from kwashiorkor—he is prone to develop later a primary cancer of the liver, as well as a chronic deterioration of health. Kwashiorkor, if not too far advanced responds quickly to relatively small amounts of skimmed milk, but milk is one of the rarest foods in underdeveloped countries. Although self-evident forms of the disease are not so common outside Africa, there are signs of it in most underdeveloped countries. Apart from its clinical importance, the modifications of this disease (as of other deficiency diseases) must contribute to the poor health, lowered efficiency and premature deaths of millions in the protein-deficient underdeveloped countries.





Ignorance and taboos contribute to nutritional deficiency diseases in countries where the diet, even when it is not deficient in calories, is precariously balanced and where an adverse variation in an otherwise unvaried diet can be disastrous. For example, in the fertile and fruitful provinces of Northern Thailand, it was not poverty but prosperity that produced beri-beri, because in improved circumstances the population preferred the more attractive polished rice to their customary unpolished rice, rich in vitamin B. Their traditional diet yielded no other source of vitamin B and a beri-beri epidemic occurred. Similarly, expectant and nursing mothers are often barred by taboo of custom or religion from eating precisely those fruits and other foods which are indispensable to them.

The problem, then, of mass disease is thus not only a question of medical means, of making more and better food available, but also of combating ignorance and age-old superstitions and prejudices.

The foregoing maps are intended to show broadly the world distribution of certain mass diseases. They do not justify comparisons between countries and are not meant to show the results of recent work.

#### THE CONTROL OF MASS DISEASES

Insect-borne mass diseases like malaria can be controlled—as has been demonstrated by large-scale projects in all parts of the world—by modern methods, such as DDT spraying, and at relatively small cost (15 cents to 50 cents per head of the population). Person-toperson diseases such as syphilis and yaws can be combated by penicillin at a cost of about two dollars per head. Tuberculosis, another person-to-person disease, may be restrained by BCG (Bacillus Caemette Guerin) inoculations now being carried out on a world scale. The emphasis is on "restrained" because the BCG cam-

paign does not, like DDT, destroy the vector of the disease nor, like penicillin in yaws and syphilis, cure the carrier. It merely assists in protecting a proportion of those likely to be exposed to tuberculosis infection in communities still ridden with tuberculosis. In spite of new antibiotics which have an effect on certain forms of tuberculosis, there is still no proven substitute for improved housing, reducing the risks of contagion, and long hospitalization. And those mean social reforms, capital expenditure and medical resources not yet apparent in underdeveloped countries.

Only when the mass diseases have been reduced or cleared away, does the social and medical significance of other diseases become apparent and comparative statistics begin to have some meaning. (For one thing, in the process of dealing with mass diseases some system of statistics, however elementary, is built up.) The case of Ceylon is one in point. For centuries the major cause of death and illness in Ceylon was malaria. Endemic malaria prevailed in two-thirds of the island and periodic epidemics occurred at regular intervals. In 1934, an epidemic of malaria affected one-fifth of the island. The immediate cause of the epidemic was the prolonged drought due to the late arrival of the southwest monsoon. The pools of water in the dried river beds formed breeding grounds for the mosquitoes. The spread of disease was favoured and magnified by the gross under-nourishment of the population. Deaths from malaria in 1935 rose 3,400 per cent compared with 1933. In 1946 residual spraying with DDT (spraying of sites from which the adult mosquito attacked humans) was begun. As a result, the malaria morbidity rate was decreased by 77.5 per cent between 1946 and 1949, and the malaria mortality rate by 82.5 per cent. This was accompanied by a marked reduction in total deaths, infant mortality, maternal mortality and in some of the other major causes of death.

Table I
INHABITANTS PER PHYSICIAN

| Under 2,000   | 2,000 to 4,999  | 5,000 to 9,999  | 10,000 to 49,999   | 50,000 and over  |
|---|---|---|--|--|
| Argentina Canada United States Japan Lebanon Cyprus Israel Austria Belgium Denmark France Greece Iceland Ireland Luxembourg Norway Netherlands Portugal Sweden Switzerland United Kingdom Australia New Zealand | Egypt Union of South Africa Zanzibar Brazil Ecuador Nicaragua Panama Paraguay Dominican Republic El Salvador Venezuela Puerto Rico British Guiana Trinidad and Tobago Jordan Turkey Hong Kong Singapore Finland Poland Yugoslavia | Algeria Madagascar Tunisia S. Rhodesia Bolivia Guatemala Peru Martinique Jamaica Ceylon Iraq Syria Federation of Malaya | Belgian Congo Fr. Eq. Africa Morocco Angola Mozambique Bechuanaland Kenya Uganda N. Rhodesia Sierra Leone Fr. Togoland Tanganyika Pakistan Aden British Borneo | Ethiopia Liberia Nigeria Nigeria British Somaliland Ruanda-Urundi Indochina Indonesia Papua New Guinea |

Malaria had been controlled and reduced to manageable proportions, i.e., it was no longer a mass disease or dominant and masking factor. It became possible to compare, or rather to contrast, a (comparatively) underdeveloped island of the tropics with an island in the Western, developed region. Ireland was chosen because it bore a superficial resemblance—of similar area, with an agricultural economy and only one city of appreciable size. But it is the differences and not the resemblances that make the comparison interesting, as the following table shows:

Table II

DEATH RATES (PER 1,000 OF THE POPULATION)

OF CEYLON AND IRELAND

Year-by-year comparisons

| Years | Ceylon | Ireland |
|-------|--------|---------|
| 1938  | 21.0   | 13.6    |
| 1939  | 21.8   | 14.2    |
| 10.10 | 20.6   | 14.2    |
| 4044  | 18.8   | 14.6    |
| 1942  | 10.6   | 14.1    |
| 1040  | 21.4   | 14.8    |
| 1044  | 21.3   | 15.3    |
| 1015  | 22.0   | 14.5    |
| 1046  | 20.3   | 14.0    |
| 1047  | 14.3   | 14.8    |
| 1040  | 13.2   | 12.2    |
| 10.40 | 12.6   | 12.8    |
| 1950  | 12.6   | 12.7    |

"In the space of one year, the total mortality rate fell from one typical of Asian . . . countries in general to a level comparable with the more prosperous and advanced countries of the world. This reduction in the death rate has been accompanied by an alteration in the principal causes of death. Although one death in every nine is still due to parasitic and infectious diseases and only one in twenty to cardio-vascular diseases, there are definite signs that the mortality picture is becoming 'westernized'."<sup>2</sup>

"Becoming westernized" means, here, that the death rate is drastically reduced and that the mortality pattern is likely to change. Diseases of the heart and the circulatory system and cancer will increase in proportion to the lengthening of the average life-span because these are diseases of the older age-groups. Part of the increase will be due to better diagnosis; the figures for such diseases are probably unduly low now because only about 15 per cent of deaths are registered with medical registrars and only a minority of all certifications are made by practitioners of "western" medicine qualified to diagnose the specific diseases.

This sorting out of diseases, with the possibilities of specific treatment, can be undertaken only when preoccupation with the self-evident "mass diseases" is diminished and when this is accompanied by an increase in the numbers and quality of medical practitioners. An example may illustrate, however, that even without the refinements of diagnosis it is possible to disentangle some of the "undergrowth" of mass disease. In El Salvador WHO set up one of its demonstration areas to show how the health of the population as a whole might be studied and improved.

The Republic of El Salvador is the most densely populated country of the American continent. It is within the tropics and its economy is essentially agricultural. The Government is keenly interested in health work and invited the co-operation of WHO. The site of the demonstration area was carefully chosen. It is 1,100 square kilometres in extent, it has a population of 100,000 which presses hard on the available resources, and the general standard of life is low. It was selected as representative of large sections of Central America with serious health problems, including malaria, tuberculosis, bacillary and amoebic dysentery, syphilis, severe malnutrition, intestinal parasite infestation, general respiratory infections, high infant mortality and many accidents. All these problems (including the accidents) are interrelated.

In El Salvador as a whole, the chief recorded causes of death were for 1948 (rates per 100,000):

| · · · · · · · · · · · · · · · · · · ·  |       |
|--|-------|
| Diarrhoea and enteritis and dysentery  Diarrhoea and enteritis, under 2 years of age | 287.1 |
| Diarrhoea and enteritis, over 2 years of age   |       |
| Pneumonia, influenza, broncho-pneumonia and bronchitis                               | 148.4 |
| Bronchitis         68.5           Influenza         16.4           Malaria           | 133.2 |

The chief causes of illness among persons attending at a clinic in the demonstration area, during 1950, were:

| Diagnosis                    | New case |
|------------------------------|----------|
| Respiratory tract infections | 718      |
| Malaria                      | 541      |
| Intestinal parasites         | 380      |
| Acute gastro-enteritis       | 289      |

A study made in 1950 in a district near the demonstration area, on infestation with intestinal parasites, showed that nearly all children were infected.

The consultant who reported on the area to WHO formed the opinion that the incidence of, and mortality from, tuberculosis was not adequately reflected in the official figures; he concluded, more generally, that the main health problems in the area were:

Dysenteries and other gastro-intestinal infections Pulmonary tuberculosis

Malaria

Malnutrition

Respiratory tract infections

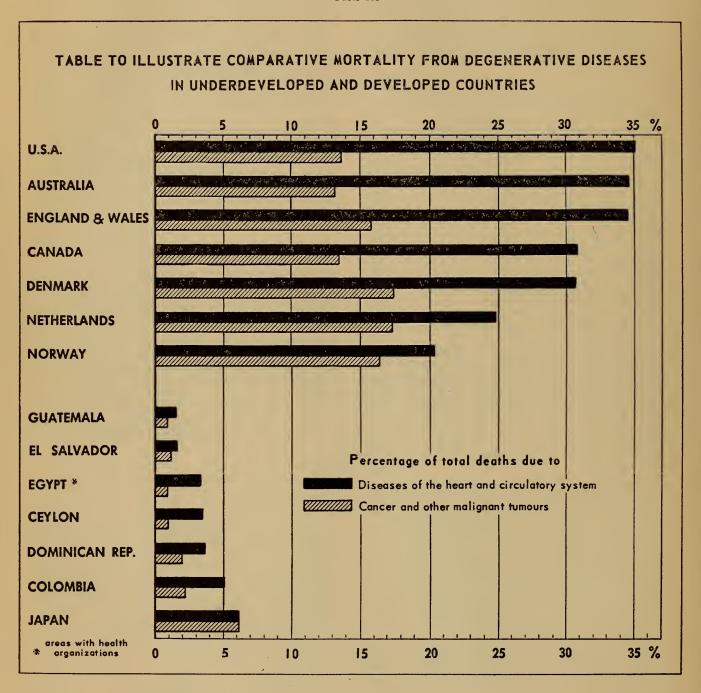
Infestation with intestinal parasites

and that it was not possible to place these problems in order of their importance.

This shifting picture of disease and death shows that there are no frontiers to our health problems, only a succession of horizons. When medical and social

<sup>&</sup>lt;sup>2</sup> H. Cullumbine, "The Analysis of the Vital Statistics of Ceylon", The Ceylon Journal of Medical Sciences, VII, parts 3 and 4, p. 120. Another example of rapid decline of death rate with changing pattern of disease is that of Puerto Rico where, in the decade 1936-46, the death rate dropped from 20.0 to 13.1, largely because of reduction in a few diseases (diarrhoea and enteritis, tuberculosis, malaria).

Table III



advances cross one horizon a vista of new problems stretches ahead. Diseases which have been submerged or ignored in the preoccupation with the mass diseases assume a new importance which is sometimes only relative but is often real. When a country has advanced so far as to get effective control of infections and contagious diseases, when insect-borne diseases have been eliminated and efficient sanitation has banished the water-borne diseases, degenerative and "stress" diseases assume new proportions. Industrial development brings new medical hazards such as silicosis. More infants survive with congenital weaknesses. The conflicts and anxieties, which the intensity and urgency of an advancing society can create, may increase the extent of mental ill-health.

"New" diseases such as poliomyelitis appear to emerge. "New" is so written because evidence of this disease is found in the Egyptian steles of the eighteenth dynasty (1580 B.C.); but it has acquired a new prominence in recent years, due partly to improved diagnosis but also, probably, because it was previously masked or inhibited by the mass diseases. Indeed it looks as though this disease (misnamed "infantile paralysis"although by no means confined to children and always paralysing) is a levy on a rising standard of living, for the rising curve of poliomyelitis is closely related to the rising curve of prosperity. It has so far reached its highest epidemic proportions in the well-to-do countries of America and Europe and is relatively frequent among the well-to-do classes. It has occurred in recent years in poorer countries in Asia and in Latin America but it may be a case of a virus which, without the competition of other infectious diseases, acquires a new virulence in the advanced countries.

The degenerative diseases are mainly those which are associated with the older age groups-diseases of the heart and circulation, brain-haemorrhages, organic and glandular disorders and cancers. Diseases of the heart and circulatory system and cancers and tumours alone now account for over 50 per cent of all deaths in eight countries (which are also the eight countries with the highest per capita national incomes) and the percentage of deaths from these diseases is currently increasing, as the following figures suggest.3

Percentages of deaths from diseases of the heart and circulatory system and cancers and tumours

|                  | Earlier year | Per cent | Later year | Per cent |
|------------------|--------------|----------|------------|----------|
| Australia        | . 1940       | 49       | 1947       | 58       |
| Canada           | . 1941       | 46       | 1948       | 53       |
| Denmark          | . 1941       | 45       | 1948       | 55       |
| New Zealand      | . 1940       | 49       | 1949       | 58       |
| Sweden           | . 1940       | 51       | 1947       | 59       |
| Switzerland      | . 1940       | 49       | 1949       | 59       |
| United Kingdom   |              |          |            |          |
| (England, Wales) | . 1940       | 48       | 1947       | 59       |
| United States    | . 1940       | 49       | 1948       | 58       |

Diabetes, due to the degeneration of the endocrine gland which produces insulin, is also statistically on the increase in Western countries and is not confined to the older age-groups. Modern research would indicate

that a least some forms of rheumatism, affecting millions in the temperate zone, are due to glandular deficiency or disorder, and are probably "degenerative" in this sense.

Gastric and duodenal ulcers, now increasingly common in the advanced countries, are examples of "stress" diseases; and there are indications that some of the "degenerative" diseases, particularly of the vascular system (such as arterio-sclerosis and thrombosis), formerly regarded as the diseases of aging, are manifesting themselves as "stress" diseases in younger agegroups.

Statistically, the extent of mental ill-health in advanced countries looks ominous. The amount of increase is deceptive because of better diagnosis and better statistics and because of the increasing recognition of the value of treatment for nervous and mental conditions which a few years ago would have been neglected or ignored. Even allowing for the apparent increase, there is undoubtedly a real increase in neuroses associated with the stress of modern life.

Progress, therefore, is not without its penalties and our technological civilization has still a long way to go before it achieves health, a "state of complete physical, mental and social well-being and not merely the absence of disease and infirmity".

A composite picture of differences—relating to health levels—between the less-developed and more developed areas of the world is shown by the table below, taken from Dr. Winslow's monograph<sup>4</sup> for WHO:

Table IV

|                                    | Developed<br>areas | Intermediate<br>areas  | Under-<br>developed<br>areas |
|------------------------------------|--------------------|------------------------|------------------------------|
| Proportion of world population     | One-fifth          | less than<br>one-sixth | two-thirds                   |
| in United States dollars           | 461                | 154                    | 41                           |
| Food supply, calories per          | 3,040              | 2,760                  | 2,150                        |
| Physicians per 100,000 population  | 106                | 78                     | 17                           |
| Life-expectancy at birth, in years | 63                 | 52                     | 30                           |

The position may be further illustrated by a different approach. Nothing tells more eloquently the state of health of a community than its infant death rate.5 At one end of the scale there are the countries where a decimalplace improvement is a public-health triumph. At the other end of the scale, infant deaths are so commonplace that they are overlooked in places where the 'registrations" are mental notes kept by the village headmen or pebbles kept in a bowl and where still-births or neo-natal deaths ("under one week") would probably never be reported.

Infant death rates are an index not only of the lack of proper mother and child health services but of depressed social conditions generally. They react to improvements in income levels, feeding, housing, sani-

<sup>3</sup> As in the case of the differences between less-developed and more-developed countries (see table III), the differences indicated here between earlier and later years will be in part due to improved diagnosis.

<sup>&</sup>lt;sup>4</sup>C. E. A. Winslow, The Cost of Sickness and the Price of Health, WHO Monograph Series, No. 7.
<sup>5</sup> For a table of infant mortality rates, see chapter II, p. 14.

tation, education, working conditions (in the case of women employed in industry) and, spectacularly, to the control of the mass diseases. In Ceylon, a reduction of 37.4 per cent in the malaria death rate was accompanied by a reduction of 24.4 per cent in infant deaths. In Burma, on the other hand, as a result of the ravages of war and the dislocations of civil unrest, a group of municipalities reported a rise between 1947 and 1949 from 298 to 351 per 1,000 in the infant mortality rate. (These figures are distorted by the fact that immigrants from other parts came into the towns for hospitalization.)

There is a popular tendency to assume that, since mass diseases are disproportionately high in the tropical countries, climate will, itself, limit the extent to which health can be improved. But health depends more on the degree of development than on the degree of latitude, as shown by wide differences in infant mortality rates of different groups in the same areasgroups that live side by side but have different standards and levels of living, differing health services, differing maternal and infant care, etc. The problem which confronted the pioneer sanitarians in industrialized temperate countries a century ago must have looked just as intransigent as tropical mass diseases do today-and more so, because today we know much more about the nature of diseases and have much better scientific means of coping with them. The tuberculosis rate in the United States is a tenth of what it was a century ago (though it still costs \$350 million a year for medical care and ancillary services). In Uruguay, in 1934, only four cities had safe water supplies; by 1949, the number had risen to 157. Infant mortality rates fell from 95.7 in 1934 to 42.1 in 1949 and deaths from diphtheria decreased from 384 to eleven in the same period. This was secured at the cost of a heavy investment in sanitary services.

If, therefore, we use infant mortality rates as a rough index of health conditions we can get a fair picture of the distribution of ill health throughout the world which, for lack of morbidity returns, cannot be built up otherwise. The fact that the infant death rates can be exactly expressed by some countries, approximations offered by others and there are no returns at all from many, does not destroy the general picture. In advanced countries, figures which have been drastically reduced thereafter will react only to improved maternal care, but in underdeveloped countries these figures will reflect not only low standards of ante-natal care but also the prevailing diseases and insanitary conditions leading, e.g., to gastro-intestinal infections.

# THE DEVELOPMENT OF HEALTH SERVICES

The geography of ill health is also the geography of hunger and ignorance. It shows the contours of underdevelopment and presents a picture of the vicious circle—disease-poverty-underproduction-malnutrition-disease. It is easy to see where to break the vicious circle; how is not too simple. Health services emerged in the Western countries where the quickening prosperity of the Industrial Revolution had produced a surplus wealth which could be directed into sanitary enterprises which were not only good investments but had the incentive of fear. (Cholera, it has been said,

was the best sponsor of the public health officer.) It was a gradual development through several successive and overlapping phases. First there was the steady improvement of general sanitation, water and food supplies, and facilities for the isolation of communicable diseases—the lazarette and the quarantine hulk; the day had still to come when isolation hospitals were to be places for treatment of sufferers rather than for their isolation. Next emerged true preventive medicine, with the growth of satisfactory techniques in bacteriology, vaccines and sera, epidemiology and vital statistics. In this phase came the demand for services to look after the health of school children, industrial workers, mothers and infants, and for an attack on the mass diseases of these countries. Then came the scientific phase which provided the technical and pharmacological facilities to deal with disease, infectious and noninfectious. To the vaccines and sera were added the chemotherapeutic drugs, e.g., sulphas and antibiotics, which gave doctors the means of attacking, selectively, the specific causes of diseases. Insecticides, such as DDT, strengthened the means of indirect attack—intercepting and destroying the vectors. And concurrently, the social concept of disease, reinforced by the science of nutrition and by social and industrial psychology, focused attention on man's environment. The wider significance of this social concept was manifested in the ideas which inspired the establishment of WHO the recognition that man's environment included the whole world: "Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger".

But the growth of health services in the West was not only a bonus from existing prosperity; it was founded on medical traditions. It was a gradual expansion—supply and demand—of the facilities of existing medical institutions not only to produce more qualified men and women but to adapt to changing requirements, expressed today in establishment of chairs in child health, industrial health and social medicine, with all the refinements of the various specializations. It was an organic growth, not a planned and blue-printed system of development and, within the broad common pattern, no two countries conformed. From the same traditional origins and with similar medical problems, Britain and the United States evolved different and indeed contrasting systems. Britain consolidated a century's growth of public and private medicine as the National Health Service. The United States limited its public sector and encouraged private medicine while expanding by private endowment and private trusts medical facilities and advancement.

In the underdeveloped areas, however, release of the resources of the countries from the tangled undergrowth of mass diseases is a prerequisite of development. Just as the Panama Canal could not be constructed until Gorgas had mastered yellow fever, so the technical resources of some of these countries cannot be effectively exploited until the conditions of better health are created. Health in this case is a mortgage, not a bonus. Somehow governments are having to finance the capital requirements of health. Nor can they take a hundred years to evolve an organic growth; their health services have to be prefabricated, designed on

Health Conditions 33

the experience and practices of the countries which developed theirs in a more leisurely manner, but adapted to the special conditions and difficulties of their countries. There is available a considerable fund of national experience in building up health services for less wealthy rural areas of developed territories. For example, experience in the provision of reasonably good standards of medical care in rural regions of Denmark, the highlands and islands of Scotland, the prairies of Canada and the collective farms of the USSR has shown that in such cases it is necessary for governments to intervene and spread the burden which the individual cannot afford and which offers few inducements to the private practitioner. Such experience is being made use of by the governments of the underdeveloped countries.

There is no reason why such governments should not take short cuts, avoiding some of the tortuous routes necessarily followed by others in gaining experience. They can also make use of the latest technical knowledge to by-pass obstructions which, in the past, had to be worked through laboriously. They are defining their objectives in terms of the needs and capacities of their country and planning their health services accordingly; they cannot afford the luxury of refinements and they have to work within the severe limits of their medical manpower.

These limits, even more perhaps than finance, are the most formidable problem. In all the underdeveloped countries the cadres of medical personnel—doctors and auxiliaries-are insignificant. Medical schools and training facilities are few. Even the discouraging figures of "Inhabitants per physician" (table I) exaggerate the availability of doctors because of the tendency of qualified physicians to concentrate in the cities and towns, to the neglect of the villagers and country people. The same is true of nurses. In global terms, there is an immediate need for twice the 900,000 doctors, who are now preponderantly in the advanced countries. The scarcity of nurses and other auxiliaries is even greater. There is no question, even if it were a practical proposition, of a general redistribution of the world's medical personnel. There is indeed a shortage of doctors and even more of nurses in the advanced countries, relative to the requirements of more highly developed health practice. In any event, the need is for native practitioners who know and can better help their peoples. The medical schools capable of training them do not exist in sufficient numbers where the need is greatest. They are being increased but it takes time and teaching personnel is not readily available. Furthermore, there is the problem of inadequate elementary and secondary education, the graduates of which are in demand for other essential services as well as for medicine. When students are sent abroad—and they could never be sent in sufficient numbers to fulfil the needs of the larger countries—there is the problem of readjusting them to the conditions of their own country and ensuring that they go into the areas where they are needed. (Some governments have taken legislative powers to require all doctors on graduating to undertake medical service designated by the State). In some of the best organized programmes experienced doctors are being sent abroad to train as medical teachers and return to

their own countries to teach teachers. One solution which is being extensively adopted is to produce more medical auxiliaries from whom neither high educational qualifications nor a degree is demanded. There are many examples: the health visitor in India; the feldshers or assistant physician health educators in the USSR; the "Native dressers" in British African colonies; the peasant officials who act as health activators in South America. In Indonesia there are male and female mantris, trained hospital assistants who can be sent out into the villages as competent, if unqualified, practitioners and there are also the village sanitarians, with a four years' elementary schooling and a year's training in simple hygiene, who are the public health officials in their own locality. There are many types of such medical auxiliaries, who in some cases might be described as "apprentice doctors" or "medical craftsmen" and who in other cases are barely literate "medical wardens". But they are filling a real need and are the militiamen of the health services until the graduate doctors appear in sufficient numbers from foreign training or from the national medical schools. This not undesirable form of improvisation (which does not impair proper standards of medical qualification), plus the need to compete, if not to compromise, with existing practitioners of indigenous medicine, is producing in these countries their own patterns of health services and of training for those services.

Another serious difficulty confronting some underdeveloped countries is the anomalous role of women, where religious and social segregation has tended to bar them from education and professional training while, at the same time, denying them the services of male medical personnel. The attitude towards the participation of women in medical work is being modified in all these countries, largely through the development of mother and child health services; but it is a question not only of providing women's medical schools and nursing training centres but also of expanding the facilities for ordinary education for girls so that the candidates are available. It often means, too, that since women can only be treated or nursed by women, a dual service, even with separate hospitals, is being set up. Headway is being made but it is necessarily slow (the resistances in the West to the adoption by educated and better-class women of nursing and to women's entrance into the medical profession are recent history); but the functioning of the mother and child health services is itself a factor in producing the change. In gaining access to the women and the home, these services are proving themselves to be an important form of fundamental education. "Teach a woman", it has been said, "and you teach a whole family". This is especially true of health education of the public.

### FISCAL PROBLEMS

The comparison of developed and underdeveloped countries has so far been directed mainly to technical development. It is necessary also to consider the fiscal problems that countries are facing and the experience of these problems in developed and underdeveloped areas. These experiences have not always been parallel and therefore what has happened in the more developed countries may not give the same guidance as for technical development.

While it is relatively simple to cost a campaign against a particular disease, it is difficult to calculate the comprehensive cost of a health programme on any basis by which one country can be correlated with another.

Figures are often cited for the cost of the health programme in relation to the total national governmental budget, or in relation to the total income of the country as a whole. To state that a nation spends 5 per cent or 10 per cent of its governmental budget on health is of little or no value, since both elements determining the ratio are highly variable, depending on local conditions. A ratio between the health budget and the total national income (not merely governmental income) is somewhat more significant. In the more prosperous areas it has been estimated that a purely preventive programme can be financed at a cost of about 0.5 per cent of the national income, while curative medicine requires an expenditure of ten times that amount. In the United Kingdom, the total cost of both preventive and curative services is in the neighbourhood of 5 per cent of the national income. This type of estimate gives a false criterion of the needs of underdeveloped countries where the cost of essential health work goes up as the income goes down.

The least fallacious criterion would seem to be the actual (or the ideal) expenditure per capita, for a given area. On this point data for funds spent on a national scale are obtainable without great difficulty. Examination of recent figures from seven countries (Denmark, France, Italy, the Netherlands, Sweden, the United Kingdom and the United States) seems to suggest that between \$0.50 and \$4.00 per person, primarily for preventive work, is spent by the respective health authorities concerned. There are, however, two errors involved in such figures. The costs listed in a national budget statement seldom permit a sharp distinction between preventive and curative activities; and they omit, of course, health expenditures on a state or cantonal, or on a local basis. These latter contributions to the total health budget may be negligible in certain countries, while in others they constitute a major part of the total effective health budget.

When the costs, in the advanced countries, of curative medicine, of hospitals and of physicians' services are added to the cost of the public health preventive services, the combined figure is very large. The Ministry of Health in Denmark spends nearly three times, and the Ministry of Health in Sweden more than three times, as much on hospitals as on basic public health work, although much of the hospital service in both countries is provided by sources other than the Ministry of Health. In Great Britain the cost of preventive services, national and local, after deducting recoverable costs was £67,500,000 in 1949-50. During the same period the all-inclusive National Health Service cost £425,200,000, more than six times as much, giving an average cost of £8.6 per capita per year.

It is clear that a "sickness service", i.e., curing the ills which already exist, is disproportionately expensive when compared with the cost of the services which would prevent much of the sickness requiring treatment. There is already a danger that the long-term

work of building the defences of health may be underfinanced; the same problem exists in a modified form in the underdeveloped countries. One such country, for example, has one physician to every 63,000 persons, one nurse to every 61,000 persons, one hospital bed to every 4,000 persons. Over 30 per cent of the people are infected by malaria. Yaws, venereal disease, dysentery and ancylostomiasis are common. About 12 per cent of the whole national budget presently is allocated to the Bureau of Public Health and Sanitation but this provides only \$0.16 per head and, with the heavy and unsatisfied demand for treatment of cases in hospitals and clinics, prejudices the possibility of a real preventive programme.

Nor can figures or estimates from the highly developed countries give any real guidance for underdeveloped countries, because the pattern of disease has changed and the vector diseases, the infectious diseases, and the diseases of unsanitary conditions have been replaced by the degenerative diseases and by an increasing concern with, and better diagnosis of, mental conditions. It is not a matter of an injection of penicillin (as with yaws) but of elaborate and expensive equipment for diagnosis and therapy and the costly specialized treatment and specialized nursing of less easily dealt with diseases. With the extension of the span of life and the increasing proportion of the older age-groups, there has been a corresponding shift in the ratio of the chronic sick to the acute cases. There has also been a change in the social pattern. Whereas in the past, and in the underdeveloped countries today, the aged and the chronics were the accepted responsibility of the family, there is a tendency in the higher-income countries to substitute hospital treatment for family care.

In the more-developed countries more attention is now directed to conditions that are less easily dealt with. Because the disease picture has thus changed, the cost of medical care is high in relation to the total investment in health. Indeed, many of these countries are now facing a dilemma. For example, in England a hospital bed means a capital cost (about £4,000) nearly three times the cost of a family house, and in services, including staff, upkeep, food, etc., costs about £3 a day. "A hospital bed is more extravagant in capital and maintenance than the most luxurious hotel", Dr. J. M. Mackintosh, Professor of Public Health at the London School of Hygiene and Tropical Medicine, has written.

These expensive modern hospitals are designed, equipped and staffed to restore the patient to active and useful life; any case that could be as efficiently treated at home, or at an out-patient clinic, or health centre, or could be moved to a convalescent home or to a less expensive institution, providing care rather than specialized nursing and treatment, is occupying the space that could be used for some other patient in greater need.

In the advanced countries considerations of relative efficiency, as well as of cost, are producing a devolution of health services which corresponds in some ways to the evolution of such services in the underdeveloped countries (the increasing use of medical auxiliaries—health visitors, district nurses, sanitarians, public health nurses, hospital assistants, X-ray technicians, physio-

Health Conditions 35

therapists, etc.—who do not have to be medical graduates). Whereas, as has been noted, the medical auxiliaries are providing a limited service in underdeveloped countries until the output of qualified doctors becomes adequate, the medical auxiliaries in the developed countries are extending the perimeter of the health services and relieving the medical profession of routine duties, the better to practice their professional skills. In both developed and underdeveloped countries, the medical auxiliaries fulfil the essential function of health education.

Although the different systems and different levels of medical advancement make cost comparisons difficult and misleading, the direct costs can generally be expressed under certain categories of outlay such as: medical training, preventive services, personnel, physical facilities (sanitary works, hospitals, clinics, etc.), drugs, etc. These, however, are no real measure of the commitments of a health service because the medical aspects cannot be separated from their social context. The need for large public works, such as piped water and sewage systems, better housing, more schools, improved factory conditions, better, as well as more, food (which means, among other things, an animal health service) and more amenities for the actively healthy who have replaced the passively sick—this need is emerging as the mass diseases retreat.

The cost of social services, therefore, increases as a community charge and concurrently health services tend to become more and more expensive as the picture changes from one of mass diseases to one of degenerative and stress diseases or, as with the infant death rates, to one where further improvement is less a by-product of preventive medicine than a case-by-case function of clinical medicine. For example, it would probably cost Sweden more to gain one point per 1,000 than it cost Ceylon to reduce its infant mortality by 25 per cent—as a secondary result of malaria control. Only a healthy community can afford to have the refinements of a health service because such a service is a function of a prosperous economy. Yet a sick community cannot afford not to have a health service because disease is a basic cause of its poor economy and an effect of its poverty.

In the wealthy areas the loss of many millions of dollars a year through illness is a serious wastage but it need not seriously affect an economy which, in addition to such concealed loss, can still maintain a high per capita income level; but Egypt's loss of \$60 million a year through bilharziasis is proportionately much greater because the disease is a determining factor in a low economy. In any economic assessment of a country the cost of health has to be equated with the cost of sickness. As the incidence of disease is reduced so is poverty, because people are better able to develop their resources and improve their social lot. The effect is not merely physical: as man comes to realize that he can be the master of his environment and not its slave he gains not only physical energy but the will to apply it.

THE WIDER CONSEQUENCES OF HEALTH PROGRAMMES

Not infrequently, the removal of a disease is equivalent to the discovery of a new land or the extension of a frontier. It is being clearly demonstrated in the

Himalayan Terai, in the Uttar Pradesh state of India, where a fertile tract of over 2,000 square miles went to jungle 1,000 years ago because malaria killed or drove out the cultivators. As a result of malaria control, that jungle is now being cleared and the area resettled. An immediate programme involving 100,000 acres is providing fertile farms for thousands of immigrants from other parts who will produce food not only for themselves but for others. But it is not merely a matter of providing DDT and bulldozers; it means tube wells to yield clean water; roads; public utilities (such as electricity); houses; hospitals and public health services; schools; new industries, not only to provide goods but to draw off surplus labour from farms which are being increasingly mechanized; co-operatives and social institutions. Here is an example in which the vicious circle has been broken. The basic charge is falling on the federal and state governments with some international help (WHO and UNICEF are helping with malaria control; FAO is helping with the clearing and development of the land; the International Bank is helping to finance the Indian Central Tractor Organization which supplied necessary mechanical means); but the immigrants in varying degrees are introducing new capital and the system of renting the state lands amounts to long-term loans—improvements of the holdings entitle the settler to reduction or remission of rent over a period of years. Provided that the level of health and vitality of the population can be maintained, the rising prosperity of the region will provide the social increments.

Developments such as these are demonstrating that education is itself a concomitant of health; only an enlightened and instructed people can take full advantage of the services provided; per contra, a diseaseridden malnourished people can neither provide nor enjoy the amenities of education. To produce the personnel for medical and health services there have to be educational facilities, not only at the higher level of advanced training but at the lower level of the elementary and secondary schools which produce the educated masses from which the candidates can emerge. Improved health increases a demand for extended facilities for education, often directly, as in the removal of a mass disease (e.g., in malaria-ridden districts as many as two out of three children on existing school registers would be absent, but with control of the disease absenteeism is so reduced as to produce an accommodation and staffing crisis).

The relation of disease to agriculture is apparent in the underdeveloped territories. Mass diseases mean a reduction of manpower. In 1942, for instance, there were at least 2 million cases of malaria in Greece; in 1949, there were 40,000. It is estimated that the DDT operation against malaria resulted in a saving of manworkdays which were the equivalent of adding 100,000 to 200,000 workers a year, and these do not represent additional mouths to be fed. The spraying of one selected area in Grèece so reduced malaria that the crop-production increased by over 20 per cent. Mass diseases also mean reduced initiative and are a deterrent to the improvement of agricultural methods. A lethargic, moribund people do not respond to new incentives, but one of the first results of relief from the burden of a disease (e.g., yaws in Indonesia) is a new

interest in improved methods of soil management, irrigation, plant-breeding, etc.

Diseases are often a direct deterrent to industrial development and the exploitation of natural resources. There have been many obstacles to the development of Afghanistan but one of the foremost has been the prevalence of malaria. The areas between the Hindu Kush and the Oxus River were so heavily affected that there was an old Afghan saying: "If you choose to die, go to Kundus". Kundus became the centre of a malaria control programme which not only made possible the exploitation of land virtually abandoned but has made possible the cultivation of cotton and the opening up of a large cotton mill. Oil has been discovered in the region and malaria control has made it possible to recruit labour to develop it. Communications to this region are poor and a secondary consequence of the control of a disease will be the development of motor-roads in a country practically without them.

The social consequences of the introduction of health measures, which take many forms in different circumstances, can be simply illustrated in Afghanistan where the example of certain districts being cleared of malaria and typhus led to popular petitions to the central government for the extension of the programmes.

Reduction of diseases has profound repercussions on the population problem. Disease, famines and wars have in the past been the ruthless "natural" way of controlling population increases. If disease is diminished and wars avoided, famine, it is argued, will supervene because the birth rate will increase, more children will survive to marry and have more children and, at the same time, people will live longer. The problem is how to feed the multiplying population, particularly since the pressure will increase in the areas where people already do not have enough to eat. It is as dangerous, however, to exaggerate this problem as it is to under-

estimate it. If the arguments of "over-population" were to prevail, the ruthless logic would be to withhold the benefits of modern public health from those people who most desperately need them. Certain races, in regions characterized as "underdeveloped", would be condemned to suffer and die from diseases which human ingenuity can now combat. Moreover, apart from the calculated inhumanity of any such suggestion, disease is a considerable factor in the incapacity of people to feed themselves. In Mymensingh, a district in East Pakistan, malaria control not only diminished infant mortality ("more mouths to feed") but increased the production of rice by 15 per cent—from the same acreage ("more and better hands to work") without any improvement in methods of cultivation or in the variety of rice. This increase was due to the fact that whereas in the past three out of every five landworkers had been sick of the fever at the critical seasons of planting and harvesting, five out of five were available for the manual operations when the malaria had been controlled. In other areas, removal of seasonal malaria has made it possible to grow a second crop. In still others, hundreds of thousands of acres of fertile land, which had been abandoned because of malaria, have been recovered for cultivation, People who are sick, ailing and incapacitated by disease lack the energy, initiative and enterprise needed to adopt new methods and improve their means of food production and so increase the yields from existing acreages.

The control of disease, the first step to positive health as defined at the beginning of this chapter, is a precondition of economic and social development. The advance of any community depends on the extent to which it reduces the burden of ill health which squanders human resources, wastes food in nourishing bacteria and parasites, produces social lethargy, and prevents people and countries from developing their full capacities.

# Chapter IV

## FOOD AND NUTRITION<sup>1</sup>

B.

Many of the currently significant patterns of food production, trade and consumption, if they did not altogether originate from the Second World War, have at any rate clearly taken shape as a result of it. The low level of food production in the underdeveloped areas of the world, and the wide disparities between food consumption in these areas and in the more advanced countries, have long been recognized as constituting one of the outstanding problems of the world's food and agricultural situation. The Second World War aggravated this problem acutely. Territories were laid waste not only in Europe but also in the Far East. Destruction of livestock, farm buildings and machinery, and storage and processing facilities was on an immense scale; soil reserves, and sometimes agricultural manpower, were seriously depleted. Most of the prolific fishing grounds were closed and the best craft were converted to war purposes. Important markets and sources of supply were cut off from each other. The immense burden of supplying the Allied Powers with food and other requisites for the war effort fell upon the remaining accessible sources of supply, chiefly where output could be rapidly expanded. In this way, the main features of the postwar dependence of large areas of the world on the surpluses of Northern America and Oceania emerged. The history of the world food situation during the postwar years is essentially that of an arduous struggle to increase agricultural and other output all over the world, and to restore some balance in the patterns of production and international trade. The marked increase in population that has taken place throughout the world during this time greatly increases the urgency of this struggle, which is still continuing, its successful issue obstructed by political disturbances, by repeated foreign exchange crises and by recurrent shortages of food, raw materials and other means of production.

# PRODUCTION

Appendix A gives figures on the area, yield and production of the world's major food crops, region by region, for the immediate and the more recent postwar period, and includes a comparison with prewar years. In order to reduce the effect of fortuitous weather conditions, figures for the early postwar period are shown as an average for the years 1946 and 1947; those for the more recent period are taken as an average for the years 1949, 1950 and 1951.

The figures for 1946-47 amply illustrate the greatly changed situation resulting from the war, the heavy decline in grain, potato and sugar production in Europe, the fall in rice production in the Far East and the remarkable gains in grain and sugar production in North and Central America. Changes in crop areas, though important, contributed only in part to the

altered pattern of production. In the world as a whole, the change in yield per hectare was the major factor. In Europe, the cumulative wartime shortage of fertilizers depleted soil reserves to the point of exhaustion, sharply reducing yields. In Asia, the destruction of livestock affected the supply of draft power. On the other hand, on the American continent and to a lesser extent in Oceania, increased mechanization and the rapid improvement in techniques under stimulus of war were responsible for a rise in yields. A concise picture of the scale of postwar recovery and progress is obtained by examining the trend in food production per capita in the different regions of the world. A convenient way of doing this is to convert major foodstuffs into a common unit such as wheat equivalent. This is done in table I for eight major crops, the production per capita for each region being expressed as an index of prewar production.

 $Table \ \ I$  Indices of total and per capita production of food crops $^{ullet}$ 

|                 | Avera | ige 1946-47 | Average 1949-51 |            |  |
|-----------------|-------|-------------|-----------------|------------|--|
| Region          | Total | Per capita  | Total           | Per capita |  |
|                 | (Prev | var = 100)  |                 |            |  |
| Europe          | . 71  | 68          | 96              | 90         |  |
| North and       |       |             |                 |            |  |
| Central America | . 143 | 124         | 150             | 124        |  |
| South America   |       | 87          | 93              | 72         |  |
| Far East        |       | 85          | 99              | 87         |  |
| Near East       |       | 91          | 115             | 95         |  |
| Africa          |       | 98          | 125             | 105        |  |
| Oceania         |       | 94          | 116             | 103        |  |
| World           |       | 9 <b>i</b>  | 111             | 97         |  |
|                 |       |             |                 |            |  |

<sup>\*</sup>Includes eight principal crops—wheat, rye, barley, oats, maize, rice, sugar and potatoes—or wheat equivalent, caloric basis. All figures exclude USSR.

The table does not include crops like millets and sorghum, pulses, sweet potatoes, yams and cassava, which are of importance in certain areas of the Far East, Africa and Latin America. Nevertheless, about 80 per cent of the world's food supply comes either directly or indirectly from the crops included. The table therefore gives a fairly reliable indication of the trends in convenient summary form. It furnishes striking evidence that recovery in food production from the low levels after the war has barely kept pace with the increase in population in the Far East and Near East, while in South America food production has decreased. The low figure for South America is mainly due to the decrease in grain production in Argentina.

The livestock situation emerging from the war was broadly similar to that of crop production, with heavy losses in cattle, pigs and sheep—especially in Europe, but also in many parts of Asia. Pigs, which are usually the kind of livestock first to be sacrificed in times of stringency, suffered the heaviest decline. Both in North and South America, however, livestock numbers in the

<sup>&</sup>lt;sup>1</sup> Prepared by the Food and Agriculture Organization of the United Nations.

| Tabl      | Table II |  |  |  |  |  |
|-----------|----------|--|--|--|--|--|
| LIVESTOCK | NUMBERS  |  |  |  |  |  |
| (million  | heads)   |  |  |  |  |  |

|                           | Horses |         |         |        | Cattle  |         |        | Pigs    |         |        | Sheep   |         |  |
|---------------------------|--------|---------|---------|--------|---------|---------|--------|---------|---------|--------|---------|---------|--|
| Region                    | Prewar | 1945/46 | 1950/51 |  |
| Europe                    | . 20   | 15      | 16      | 102    | 86      | 100     | 78     | 40      | 77      | 119    | 94      | 112     |  |
| North and Central America | 17     | 15      | 11      | 101    | 118     | 118     | 64     | 77      | 80      | 61     | 51 -    | 38      |  |
| South America             | 18     | 17      | 18      | 106    | 123     | 136     | 30     | 34      | 35      | 97     | 115     | 123     |  |
| Asia                      | . 13   | 10      | 10      | 227    | 219     | 219     | 83     | 70      | 83      | 127    | 107     | 125     |  |
| Africa                    | . 3    | 3       | 3       | 77     | 78      | 90      | 3      | 3       | 4       | 106    | 100     | 112     |  |
| Oceania                   | . 2    | 2       | 1       | 18     | 19      | 21      | 2      | 2       | 2       | 143    | 129     | 149     |  |
| World                     | 73     | 62      | 59      | 631    | 643     | 684     | 260    | 226     | 281     | 653    | 596     | 659     |  |

principle categories increased markedly (see table II). Of special importance was the increased emphasis on livestock production in South America where, during the war years, forced curtailment of wheat exports, especially from Argentina, resulted in increased internal consumption of grain for animal feed.

The changed pattern of food production affected the supply of livestock products even more profoundly than the supply of vegetable foods in the food-deficit countries. The over-all food shortage was so severe in these areas that little grain could be spared for feeding livestock. Imported feed concentrates were scarce and costly. The major part of the increased feed-grain and livestock output in the surplus areas had to be retained to supply an increasing population whose demand for meat and other livestock products was steadily expanding. The early postwar shortage of livestock products, especially meat and eggs, was particularly severe in Europe. Even in the Far East, however, where per capita production before the war was extremely small, the decline in the output of livestock products was sharper than the decline in the output of other foods.

Progress towards agricultural recovery has been fitful and inadequate. Almost everywhere agricultural production has continued to lag behind industrial production, often accompanied by an exodus of agricultural labour to industry.

In all regions except North America and Oceania and part of Africa, per capita food production has remained below prewar levels. This is also true of the countries within each region, with few exceptions (e.g., the United Kingdom and Japan, which are normally heavily dependent on food imports).<sup>2</sup>

As might have been expected, recovery has generally been greatest in the region which suffered the steepest decline during the war. Aided by Marshall Plan funds, Europe was able to register the most impressive recovery. There were, however, striking differences in the rates of progress in different parts of Europe. For example, by 1950-51 agricultural production in OEEC countries as a whole was 11 per cent above prewar levels,<sup>3</sup> and output of livestock products was not far

<sup>8</sup> The population increase in these countries over the same period was, however, 12 per cent.

behind. Fish production recovered with surprising rapidity, and by 1950 was higher than ever. In both Germany and Austria, however, as well as in most of the countries of Eastern Europe, recovery lagged substantially behind, especially in livestock. For Europe as a whole, yields per hectare are now rather higher than in prewar years, though the area under crops has not regained its former level. Yet the recovery has by no means been phenomenal. On the contrary, estimates of European recovery after the First World War show that the progress made between 1920 and 1925 was quite as impressive.<sup>4</sup> Allowance must, of course, be made for the wider area more deeply engulfed in the Second World War, the greater losses in Europe's financial resources and many other important considerations. The immense strides made in the development of agricultural techniques over the past thirty years could not, apparently, fully offset these unfavourable factors.

In the underdeveloped regions of the world, agricultural progress since the early postwar years has been much slower. In the Far East, the whole postwar period has been marked by serious political disturbances which have greatly impeded recovery. Average production of rice in the years 1949 and 1950 was still 2.5 per cent below prewar levels, while the population had increased by over 10 per cent. Since rice provides (in terms of calories) about 70 per cent of the food supply of the Far East, its slow recovery is a matter of grave concern, especially to the rice-deficit countries. Moreover, what recovery there has been, has been accomplished by increasing the area under rice through programmes which have frequently involved a large reduction in the area sown to industrial crops. The situation has been similar for coarse grains like millets and sorghum and also for pulses. These are food crops of some importance to the region. Only in the case of starchy roots, like sweet potatoes and yams, has an appreciable increase been registered. Even this development, however, more often reflects the difficult food situation and not general agricultural improvement. Farmers frequently turn to starchy-root crops when faced by conditions threatening hunger, since such crops can be produced quickly in abundance at relatively low cost.

Postwar shortages of food, raw materials and foreign exchange have stimulated programmes for the development of African territories. At the same time

<sup>&</sup>lt;sup>2</sup> Per capita availability of food for human consumption for most Latin-American countries has, however, improved in the postwar years as compared with prewar. This has been made possible by a reduction in the quantity of food exported from Latin America to other parts of the world. See section on Consumption and Nutrition below, and Appendix C.

<sup>&</sup>lt;sup>4</sup> See League of Nations Report, Agricultural Production in Continental Europe during the 1914-18 War and Reconstruction Period.

there has been a growing realization that the basis for such development must be a widespread and substantial rise in the living standards of the mass of the African populations. Nevertheless, subsistence foods like maize and root crops have languished. Climatic vicissitudes frequently result in crop failures and acute food shortages. Development programmes have had more effect on export crops like coffee, cotton, and especially fats, which were in very short supply in postwar years. The high prices which they bring on the world market may have encouraged concentration on these crops, sometimes at the expense of subsistence production. To some extent, Africans engaged partly or wholly in producing cash crops have benefited by increased cash incomes; but except where they are protected by price stabilization schemes and other effective marketing arrangements the profits have largely accrued to the merchants. Indeed, African farmers, faced with higher prices for the things they need, are sometimes no better off than they were before.

In Latin America (with the exception of Argentina, where production is greatly below prewar levels), yields per hectare have continued their slow upward trend in postwar years. This has been especially noticeable in the case of wheat and rice. In the main, however, increased output has come from expanding the area under cultivation. Fish production, although twice as high as in prewar years, is still far from meeting the needs of the region, which is importing considerable quantities of fish. The exploitation of the region's potentialities is gradually increasing. If Argentina is excluded, food production appears to be expanding faster than the growth in population. Nevertheless, for the region as a whole, the food supply still remains inadequate. High prices for a number of important minerals and other raw materials, as well as for specialized export crops like coffee, cocoa and sugar, have sporadically expanded foreign earnings and intensified demand for machinery and other manufactures and consumer goods. In fact, the postwar history of the region has been characterized by waves of prosperity, followed by depletion of exchange reserves and the repeated imposition of trade controls to achieve equilibrium in the balance of payments. Meanwhile, over the years, its food export surplus steadily dwindles.

The high levels of food production, developed during and immediately following the war in the main foodsurplus regions of the world, other than Argentina, continued during the postwar years. The consistently high postwar output in North America stands in striking contrast to the slow and painful progress in most other regions of the world. The region has responded with great resilience to the expanding food needs of its own increasing population; it has also pursued a policy of maintaining food reserves for export to other parts of the world where under-production has been a permanent feature of postwar years. It is not difficult to imagine how catastrophic the plight of the world might have been in the absence of this food reserve. At the same time, the remarkable succession of abundant harvests in this region, even though partly due to favourable weather, is eloquent testimony of the efficacy of mechanization, soil conservation, research and the application of scientific practices in raising the entire scale of food production.

The following table gives a global summary of per capita production of the world's major crops.

Table III

WORLD OUTPUT PER CAPITA (EXCL. USSR) (1934-38 = 100)

| Crop                | Average 1946-47 | Average 1949-51 |
|---------------------|-----------------|-----------------|
| Wheat               | 93.3            | 99.4            |
| Rice                |                 | 88.9            |
| Rye                 |                 | 83.2            |
| Barley              |                 | 99.5            |
| Oats                |                 | 96.1            |
| Maize               |                 | 106.7           |
| Potatoes            |                 | 87.5            |
| Other starchy roc   |                 | 110.0           |
| Pulses <sup>b</sup> |                 | 93.9            |
| Sugar               |                 | 114.1           |

\* Sweet potatoes and yams.

Only in the case of maize, sugar and starchy roots (e.g., sweet potatoes, yams and cassava) has production surpassed prewar levels. These cases are exceptional. Per capita output of rice, pulses and fats is still below that of prewar years. Especially in the case of fats the output per capita has been so low as to create acute shortages. By much effort a considerable expansion in the production of vegetable fats has been achieved, offsetting in some measure the heavy decline in the production of animal fats. Grain output per capita is approaching the prewar figure but provides little margin from which a major recovery in livestock output can be achieved. Indeed, intense competition between the respective demands for agricultural resources for direct human consumption on the one hand, and for the feeding of livestock on the other, has characterized much of the postwar period. It was particularly severe in Europe, where programmes for expanding the area under coarse grains and fodder crops had to be repeatedly abandoned or postponed to prevent recurrent food shortages from reaching dangerous proportions. In more recent years, the extensive use of substitute feeding-stuffs, improved silage and more efficient feeding methods has enabled many countries to increase livestock numbers and raise milk yields per animal with less reliance on imported feeds. Even so, the need to increase the over-all production of staple food from its present inadequate and precarious levels severely limits the possibilities of a large expansion in livestock output.

# TRADE

The volume of international trade in foodstuffs, though appreciable, has never been large compared with total world food production. From the standpoint of the nutritional and dietary situation of the world as a whole, international trade in food is an important means of spreading supplies from surplus-food areas to areas where production is below requirements. In this sense, the contribution of world food trade to human welfare assumes great significance. Indeed, if the world's expanding needs for food and other goods were met by

b Dry beans, peas, broad beans, chick-peas and lentils.

|                  | Tabl | e IV <sup>5</sup>           |       |        |       |
|------------------|------|-----------------------------|-------|--------|-------|
| WORLD PRODUCTION |      | of selected<br>netric tons) | FOODS | (EXCL. | USSR) |

|                   |            | Prewar  | 1949-50 (Two-year average) |            |         |          |  |
|-------------------|------------|---------|----------------------------|------------|---------|----------|--|
| Commodity         | Production | Exports | Per cent                   | Production | Exports | Per cent |  |
| Wheat and rye     | 149.7      | 17.3    | 12                         | 163.2      | 23.9    | 15       |  |
| Coarse grains     |            | 14.0    | 7                          | 226.2      | 10.1    | 4        |  |
| Rice (paddy)      |            | 14.8    | 10                         | 152.2      | 6.5     | 4        |  |
| Sugar (raw)       | 26.5       | 9.8     | 37                         | 32.9       | 10.7    | 33       |  |
| Fat               |            | 6.1     | 29                         | 21.5       | 5.3     | 33<br>25 |  |
| Vegetables        |            | (4.6)   | 39                         | (11.9)     | (3.8)   | 32       |  |
| Animal and marine |            | (1.5)   | 15                         | (9.6)      | (1.5)   | 16       |  |

concentrating production of such commodities in those areas best suited to produce each commodity most efficiently, trade in foodstuffs would be even more important. There could then be an increasing interchange of food, raw materials and manufactures based on economic and efficient exploitation of the world's resources. As it is, however, neither the volume nor the trend of international trade in food are necessarily good indicators of the status of the world food situation. In fact, much of the food trade in postwar years has merely reflected the distorted patterns of production emerging from the war. For example, exceptionally heavy exports of food from some areas from time to time have usually meant that other areas of the world have lamentably failed to achieve a much-needed increase in production.

Except for breadgrain and sugar, the volume of international trade in each of the main food groups in 1949-50 was still substantially lower than in prewar years, especially in rice and coarse grains, meat and fats (see table IV). Moreover, apart from breadgrain, the volume of exports as a percentage of world production has in each case declined, markedly so in the case of rice. These declines have taken place not because food-deficit countries have increased their food production per capita, though this may be true of one or two countries like the United Kingdom; on the contrary, they reflect principally the inability of deficit countries to buy enough for their food requirements and the failure of some exporting areas to achieve larger surpluses.

Especially notable has been the reduction in trade among countries within the same region.

Exports of paddy from Far Eastern countries, for example, are still only around 4.5 million tons, or about one-third of the prewar volume (see table V).

Table V

RICE TRADE IN THE FAR EAST<sup>a</sup>

(thousand metric tons)

| Prewar                     | . 13,750 |
|----------------------------|----------|
| 1949-50 (two-year average) | 4,550    |
| ,                          |          |

<sup>\*</sup> Milled rice converted into paddy equivalent.

Moreover, reduced supplies brought about a steep rise in the price of rice throughout the postwar years, forcing governments to pay costly subsidies to ensure

supplies to needy sections of the population. Political disorder, accompanied frequently by dislocated transportation and inadequate storage facilities, contributed to the difficulties of trade. Territorial changes added further complications. India, Japan, Malaya, Indonesia and other countries in the Far East, unable to secure enough supplies of rice and other foods from the usual sources, were compelled to import large quantities of breadgrain, mainly from North America, and even rice from Egypt and Brazil. In this way, the region as a whole actually became a net importer of food, whereas before the war it was traditionally a net exporter. The shrinkage of trade within continental Europe, too, has been of serious dimensions, Before the war, the grain exports of the Danubian countries and of Poland and Czechoslovakia furnished a large part of the requirements of the rest of Europe. Some of these countries also exported important quantities of livestock products. So far, attempts to restore this trade have been largely unavailing. It is, indeed, unlikely that the Danubian countries will be restored to their former importance as a grain-exporting area in the foreseeable future. The division of Germany into east and west zones has had far-reaching effects not only on Germany itself, but also in the whole of Europe. The effect of the separation of the industrialized West from the foodproducing East was aggravated by a large influx of population from eastern Germany and from other former German territories into western Germany. With the enhanced food needs of the west German population no longer supplied from the former bread basket of eastern Germany, the deficit could be filled only from other sources, chiefly from North America. Moreover, until the great industrial recovery in western Germany in 1951, the country lacked the means to buy fruits. vegetables and other foods which it formerly obtained from such countries as the Netherlands, Italy and Denmark.

Superimposed upon the great decline in intraregional trade in both the Far East and Europe, there was also a steady reduction in the food export surpluses of a number of Latin-American countries, due chiefly to the rising food needs of an increasing population in these countries and the fall in food production in Argentina. Thus, the main burden of meeting the postwar trade deficits of the world has fallen on the United States, Canada and Oceania. Food-deficit countries have striven to reduce this dependence by efforts to develop or open up sources of supply in other, non-dollar areas. So far, however, this dependence has not been materially reduced.

<sup>&</sup>lt;sup>5</sup> In comparing this table (which indicates general increase in world production since prewar years) with table III above, world increase in population must be recalled.

Table VI

EXPORTS OF GRAIN (UNITED STATES, CANADA AND AUSTRALIA)<sup>a</sup>
(million metric tons)

| Country       | Prewar | 1949-50<br>(Two-year average) |
|---------------|--------|-------------------------------|
| United States | 2.4    | 12.7                          |
| Canada        |        | 7.2                           |
| Australia     |        | 3.7                           |

<sup>\*</sup> Including wheat, rye, barley, oats and maize.

#### CONSUMPTION AND NUTRITION

National average food supplies available for human consumption, estimated by the Food Balance Sheet method for the prewar period (usually 1934-38) and for a recent postwar period (usually either the year 1949-50 or a four-year average 1946-49), are shown in appendix B. The calorie and protein contents of the same food supplies are shown in appendix C. The Food Balance Sheet is a statistical method which starts from national data on food production, trade and movement in stocks; makes appropriate deductions for the amounts used for animal feed, seed and non-food purposes; and so arrives at the estimated quantities of food available at the retail level (see FAO: Handbook for the Preparation of Food Balance Sheets, March 1949). This quantity is then expressed in terms of calories and proteins by means of appropriate nutrient-conversion factors (see FAO: Food Composition Tables for International Use, October 1949). The results obtained from Food Balance Sheets have only a limited validity. The range and accuracy of national statistics vary from country to country and many rough estimates have to be made for the production and trade of some commodities. Except in a few countries, practically no data are available on farm and commercial stocks, and in the absence of reliable statistics on food utilization, the quantities used for feed and industrial uses, as well as losses through wastage, are roughly estimated for many countries. Despite these limitations, the Food Balance Sheet remains the best available tool by means of which national food supplies and changes in food consumption from period to period can be roughly assessed.

It should be emphasized here that such consumption data reflect only the best available estimates of the national averages of food supplies and, therefore, do not represent the actual food intakes of the populations. The limited validity of the results from the Food Balance Sheet method is particularly serious in the case of the less-developed areas where statistics on food supplies are often unsatisfactory or even totally lacking. Moreover, there exist serious inequalities in the distribution of available supplies among different sections of the population in each country because of differences in purchasing power, access to markets and other factors. Significantly lower food intakes must be expected among poorer classes, especially in places less accessible to sources of production.

Information on actual food intakes and their effects on nutritional status of population can be obtained by means of special surveys. Such surveys, however, must be carried out in a comprehensive and systematic manner if they are to provide a satisfactory picture in

individual countries. Unfortunately, on this important aspect of the world social situation, our knowledge is seriously deficient. Much information is available from many countries in the better-developed regions of the world but the situation is, as usual, quite different in the less-developed regions. Systematic surveys have been carried out in very few countries in the Far East and only in one country in the Near East. Nevertheless, even the limited information available to date is useful in appraising the levels of food consumption and nutrition in various parts of the world.

For the world as a whole, average food supplies, measured in calories after allowing for wastage up to the retail level, were 6 per cent lower in recent years than in the prewar period. For a number of reasons, this decline was not as large as that in per capita food production. During most of the postwar years, threatened or actual shortages induced many countries to take exceptional measures to conserve their food supplies. Milling extraction rates were high, the admixture of coarse grains (e.g., barley, oats, and maize) in bread was appreciably increased, products normally limited to industrial uses (e.g., many varieties of oilseed) were frequently used for food. By far the largest economy was achieved by diversion to human consumption of crops normally used for feeding animals. Even so, the decline has been marked. Moreover, some of the worst-fed areas of the world have been hit more heavily than is indicated by the average decline for the world as a whole. This is amply illustrated by table VII which shows the distribution of calories and animal protein for about 80 per cent of the world's population. The remainder of the population, for which reliable information is not available, lives almost entirely in regions where food supplies are known to be generally deficient.

Table VII

DISTRIBUTION OF POPULATIONS ACCORDING TO NATIONAL AVERAGE SUPPLIES OF CALORIES AND ANIMAL PROTEINS

|                       | Per cent of | total populations |
|-----------------------|-------------|-------------------|
|                       | Prewar      | Recent postwar    |
| Calorie levels        |             |                   |
| Over 2,700            | 30.6        | 27.8              |
| 2,700-2,200           | 30.8        | 12.7              |
| Únder 2,200           | 38.6        | 59.5              |
| Animal protein levels |             |                   |
| Over 30 grams         | 22.1        | 17.2              |
| 30-15 grams           | 18.9        | 24.8              |
| Under 15 grams        | 59.0        | 58.0              |

<sup>&</sup>lt;sup>a</sup> Comprising approximately 80 per cent of the world population.

The situation, unsatisfactory as it was before the war, has markedly deteriorated (despite some gains) since the early postwar years. Over most of the Far East, where nearly one-half of the world's population is concentrated, the declines have generally been of the order of 10 per cent. Similar reductions have occurred in parts of North Africa and in a number of Near Eastern countries. In most countries of Western and Northern Europe average calorie supplies have returned to prewar levels, but in parts of Southern,

Eastern and Central Europe serious declines have not been made good. In contrast, the high calorie levels prevailing in North America and Oceania before the war have been continuously maintained and in most of the Latin-American (and especially in the River Plate) countries, there has been a steady and substantial improvement (see appendix C). Thus, not only has there been an appreciable fall in the average calorie supply for the world as a whole, but also the large disparities existing between the better-fed and worse-fed nations before the war have markedly widened.

Since calorie content can be considered as a measure of the quantity of diet, it would be useful here to consider the adequacy of national average food supplies in relation to estimated physiological requirements. For this purpose, a convenient yardstick in the form of a tentative method of assessing energy requirements is now available (see FAO: Report of the Committee on Calorie Requirements, June 1950). This method takes into account environmental temperature, body weights and distribution by age and sex of a given population. It can thus give more realistic estimates of the average calorie requirements of different population groups than any uniform standard applied to the whole world. In table VIII, the average calorie supplies in different countries are compared with the average requirements of their populations, estimated by the above method. Even a cursory examination of the table will show that the average calorie supplies, in general, are short of requirements in all regions except Europe, America and Oceania. Nevertheless, wide variations, and even some exceptions to the general pattern, appear among individual countries in the different regions. For instance, the calorie deficit in India is as much as a fourth of the requirement, while it is very small in Egypt. In Argentina there is a considerable surplus, while in Chile there is a clear deficit. It is clear that food supplies in many areas are very inadequate in relation to the requirements. However, there is one point which needs to be emphasized here. The fact that the average calorie supply in country A is smaller than in country B does not necessarily imply that the former is worse fed, especially when the two countries differ widely as regards environmental conditions and other factors. The physiological requirements of their respective populations may be different. For example, the calorie level in Turkey is considerably lower than the level in Uruguay, but, in relation to their respective estimated requirements, the food supplies in Turkey are slightly better than those in Uruguay.

Having considered the adequacy of average diets in their quantitative aspects, let us now examine them as to their nutritional quality. There is no relatively simple unit like the calorie which can be used for measuring quality because the latter depends on the presence, in satisfactory amounts and proportions, of a considerable number of other nutrients, namely vitamins and minerals. Protein content is perhaps the best available indicator because most foods rich in protein are also comparatively good sources of many of the other essential nutrients. Since this is particularly true of foods of animal origin, animal protein level is probably a better indicator than total protein level.

Table VIII

CALORIES SUPPLIES MEASURED AGAINST REQUIREMENTS
(Calories per capita per diem)

| Region and country           | Recent<br>level | Estimated require-<br>ments | Difference<br>(per cent of re-<br>quirements) |
|------------------------------|-----------------|-----------------------------|---|
| Far East                     |                 |                             |   |
| Ceylon                       | 1,970           | 2,270                       | -13.2   |
| India                        | 1,700           | 2,250                       | -24.4   |
| Japan                        | 2,100           | 2,330                       | 9.9   |
| Philippines                  | 1,960           | 2,230                       | -12.1   |
| Middle East                  |                 |                             |   |
| Cyprus                       | 2,470           | 2,510                       | - 1.6   |
| Egypt                        | 2,290           | 2,390                       | - 4.2   |
| Turkey                       | 2,480           | 2,440                       | + 1.6   |
| Africa                       |                 |                             |   |
| French North Africa          | 1,920           | 2,430                       | 20.9  |
| Mauritius                    | 2,230           | 2,410                       | 7.5   |
| Union of South Africa        | 2,520           | 2,400                       | + 5.0   |
| Latin America                |                 |                             |   |
| Argentina                    | 3,190           | 2,600                       | +22.7   |
| Brazil                       | 2,340           | 2,450                       | - 4.5   |
| Chile                        | 2,360           | 2,640                       | -10.6   |
| Mexico                       | 2,050           | 2,490                       | 17.6  |
| Uruguay                      | 2,580           | 2,570                       | + 0.4   |
| Europe                       |                 |                             |   |
| Denmark                      | 3,160           | 2,750                       | +14.9   |
| France                       | 2,770           | 2,550                       | + 8.6   |
| Greece                       | 2,510           | 2,390                       | + 5.0   |
| Italy                        | 2,340           | 2,440                       | - 4.1   |
| Norway                       | 3,140           | 2,850                       | +10.2   |
| United Kingdom               | 3,100           | 2,650                       | +16.9   |
| Northern America and Oceania |                 |                             |   |
| Australia                    | 3,160           | 2,620                       | +20.6   |
| United States of America     | 3,130           | 2,640                       | +18.5   |

It will be seen both from appendices B and C and from table VII that the quality of food supplies, judged by this criterion, has been unsatisfactory for the majority of the world's population both before and since the war. Where the food supply is sufficient in calories, it has usually a high protein content, a good proportion of which is derived from animal products, while when it is deficient in calories, the total amount of protein is usually small and the supply of protein from animal products is frequently less than 10 grams per capita per day. Here, too, the situation, compared with that of prewar years, has noticeably worsened-especially in the Far East where consumption of animal protein before the war was generally the lowest in the world. Another general indicator of the quality of national food supplies is the proportion of total calorie supplies furnished by cereals, starchy roots and sugar. Where this proportion is unduly high—for example, when these foods furnish over two-thirds of the total calorie supply—it affords clear evidence that the food supplies are nutritionally unbalanced. In table IX, such data are shown for some countries which are more or less typical of the various regions.

Table IX

PERCENTAGE OF PER CAPITA CALORIE SUPPLIES DERIVED FROM CEREALS, STARCHY ROOTS AND SUGAR IN RECENT POSTWAR YEARS

| Country and region P | er cent | Country and region P | er cent |
|----------------------|---------|----------------------|---------|
| Far East             |         | Europe               |         |
| India                | 76      | France               | 61      |
| China                | 77      | Netherlands          | 56      |
| Japan                | 82      | United Kingdom       | 53      |
| Indonesia            | 82      | Norway               | 53      |
|                      | -       | Greece               | 66      |
| Middle East          |         | Italy                | 70      |
| Egypt                | 79      | 1                    |         |
| Turkey               | 71      | Northern America     |         |
| 4.5.                 |         | United States        | 43      |
| Africa               |         | Canada               | 47      |
| French North         |         |                      |         |
| Africa               | 77      | Oceania              |         |
| Union of South       |         | Australia            | 52      |
| Africa               | 76      | New Zealand          | 46      |
| Latin America        |         |                      |         |
| Argentina            | 57      |                      |         |
| Brazil               | 62      |                      |         |
| Chile                | 75      |                      |         |
| Colombia             | 68      |                      |         |
| Mexico               | 72      |                      |         |

In almost all parts of the world where the average calorie level has fallen from the prewar average, the high proportion of calories obtained from cereals, starchy roots and sugar has been maintained. In the Far East, where it is often more than 70 per cent, it has tended to increase. This has likewise occurred in many Near Eastern countries. In the majority of European countries there has been a considerable improvement since the early postwar years, but even so the food supply is less well-balanced than before the war. On the other hand, in North America, Latin America and Oceania, cereals and potatoes now contribute a smaller proportion of the calorie supply than before the war. The tendency to consume less of cereals and starchy roots and more of nutritionally rich "protective foods" such as meat, milk, eggs, fruits and vegetables is, of course, a well-known phenomenon in countries where national real income is rising, especially from levels already relatively high. Elsewhere, poverty has compelled most countries to concentrate on foods of the highest energy content in relation to the resources expended on their production. As available resources gradually increased, there was some improvement; but the prewar pattern, defective as it was, has by no means been fully restored. Per capita consumption of protective foods remains well below prewar levels in many of the underdeveloped countries.

Special efforts have been made in many countries to increase the consumption of fluid milk. This has been due partly to the growing realization of the vital role played by milk in safeguarding the health of nutritionally vulnerable groups—namely, infants, children and expectant and nursing mothers. During the postwar years, emergency shipments of dried and condensed milk made these products familiar in many parts of the world to people who were not accustomed to milk in this form or, often indeed, in any form.

In this period, the volume of international trade in dried and condensed milk has more than doubled; these products have, in fact, established themselves as important items in the regular international trade in food.

The substantial increase in fluid milk consumption in some countries and the large exports of dried and condensed milk has been made possible chiefly by diversion of milk formerly used for making butter, as shown in table X.

 $\label{eq:table} Table \ \ X$  milk consumption and proportion of total milk for butter

| Country        | Milk cons<br>(Kg. per |        | Proportion of tot<br>milk used for butt<br>(per cent) |        |  |  |  |
|----------------|-----------------------|--------|---|--------|--|--|--|
|                | Prewar                | Recent | Prewar  | Recent |  |  |  |
| Denmark        | 195                   | 221    | 80  | 70     |  |  |  |
| Norway         | 207                   | 301    | 42  | 30     |  |  |  |
| Switzerland    | 307                   | 344    | 20  | 13     |  |  |  |
| United Kingdom | 152                   | 213    | 15  | 5      |  |  |  |
| United States  | 249                   | 289    | 42  | 28     |  |  |  |
| Australia      | 165                   | 201    | <b>7</b> 8  | 66     |  |  |  |
| New Zealand    | 168                   | 240    | 67  | 67     |  |  |  |

In general, the broad conclusions reached by a study of the national average food supplies are supported and illustrated by the results of diet surveys which show that diets in most of the heavily populated regions of the world are quantitatively deficient. This means, in plain words, that millions of people in several lands do not get enough food to satisfy their hunger. For instance, a recent survey in Ceylon shows that many of the diets are deficient in calories and that undernourishment is common among the population. A large number of diet surveys, carried out in different parts of India, have revealed that in an appreciable number of the families surveyed the average calorie values of their daily diets are below 2,000, in a few even below 1,500. A similar picture emerges from other surveys carried out in Africa and other parts of the world. On the other hand, calorie intakes have been found to be usually higher in the better-developed areas, reflecting the higher per capita food supplies in those areas.

The broad picture of the quality of diets is more unfavourable because, even in those countries where the calorie levels are adequate, the diets often do not contain enough "protective foods". Such unbalanced diets have serious effects on the health and well-being of the people. This fact is fully borne out by the surveys on the state of nutrition in various parts of the world. In Egypt, the presence of certain deficiency diseases, such as pellagra and rickets, has been revealed by nutritional surveys among both rural and urban groups, even though the observed calorie intakes correspond reasonably well with estimated requirements. In South India, a series of surveys conducted during the last few years in rural areas among poor-class families, who form the majority of the population, showed that the children exhibited various vitamin deficiencies. However, the most serious state of deficiency now prevailing in many areas of the world is a syndrome, displaying itself in various forms, which is associated with low protein consumption. This syndrome is known to be partly responsible for high mortality among children—mainly from 6 months to 5 years of age—in Africa, Central America and possibly in some other areas. Although many more surveys in different parts of the world are required to give a more complete picture, there is no doubt about the wide prevalence of nutritional deficiency diseases.

It would be untrue to assume that in all the countries where average food standards are below prewar levels, disparities between the well-to-do and poorer sections of the population have generally grown larger. Governments throughout the world have become increasingly conscious of their responsibility for safeguarding the health and nutritional status of the vulnerable sections of the population. Food rationing and price controls during the war and much of the postwar period were largely designed to give this protection. Frequently, rationed items comprised not only bread and cereals, but also protective foods like meat, milk, cheese and eggs, as in the United Kingdom. In addition, many governments assumed a heavy burden of food subsidies to ensure that the supplies of essential foods were within the means of the most needy. As food supplies gradually improved, rationing in most countries was abolished or substantially eased. Sometimes this was done prematurely and had to be quickly reimposed when acute shortages threatened to reappear. While it is probably true that rationing and other food controls have had, in some cases, a deterrent effect on farm production, it is also probable that their abolition in some countries has adversely affected the poorer classes, especially since there has been little pause in the upward trend in food prices. In a number of countries, however, substantial subsidies on foods are still maintained. The provision of supplements and special foods for infants, children, expectant and nursing mothers and other special groups, such as heavy manual workers, as well as school feeding programmes, are also practised on an extensive and growing scale. There is little doubt that in some cases these measures, together with many others, have had far-reaching effects.

Unfortunately, a satisfactory method for measuring changes in the distribution of foodstuffs within individual countries still remains to be devised in spite of the diet surveys which have already been referred to. Data on the subject are fragmentary and difficult to assemble. Nevertheless, the available information clearly indicates the serious dimensions of the problem of malnutrition in the world.

## FOOD NEEDS IN RELATION TO INCREASING POPULATION

An attempt has been made in the previous section to measure consumption levels against nutritional requirements in recent postwar years. For many regions, and for many foodstuffs, especially of animal origin, the increases needed to meet these requirements are far beyond what are possible for a number of years to come. Even a moderate advance towards better nutritional levels for the world as a whole within a reasonable time is a formidable problem. The world's population continues to increase at a rate of slightly more than 1 per cent per annum. The largest increases in population are still principally in the areas of greatest

population pressure where food supplies are seriously inadequate.

To achieve even a moderate improvement will require increases in food production at a rate appreciably exceeding that of the growth in the world's population. Moreover, since food imports can never provide more than a small fraction of the requirements of lessdeveloped areas, these increases must, in the main, come from within those areas. In most of the countries of the Far East, the Near East and Africa, increases in production of the following orders of magnitude will be required to effect even moderate improvements in average diets: for cereals it must be twice as great as the expected increase of population; for pulses, meat, milk, eggs and fish, the increase must be proportionately still greater. In Latin America and Europe, except for pulses, the increases called for are smaller, but here too, the estimates for livestock products call for an expansion substantially greater than the estimated population increase. Even in North America and Oceania production must keep well abreast of the rise of population. In almost all areas of the world, production of fruits and vegetables will have to be increased far beyond present levels. The dimensions of the problem can further be gauged from the fact that, except for one or two commodities, in none of the underdeveloped regions of the world has postwar recovery in food production surpassed population increase. In fact, in both the Far East and the Near East, where rice and other cereals furnish the preponderant part of the diet, the increase in cereal production in postwar years has been only half that of the population. As already indicated earlier in this chapter, improvement in livestock production in most of the underdeveloped areas has been negligible. Only for sugar, and for starchy roots like sweet potatoes, yams and cassava, has production kept abreast of population. From a nutritional point of view, however, it is precisely these two food groups that should receive less emphasis. Thus, in the regions where the needs are the greatest, the rate of postwar improvement has not only been totally inadequate but also, in some respects, illbalanced in relation to nutritional standards. Moreover, in many countries such as Japan, Indonesia and Malaya, much of the postwar improvement has been in the nature of recovery from extremely low levels due to wartime destruction and dislocation. This, of course, is even more true of many parts of Europe. The recovery phase is now largely over. Steady and continuous advance to better levels will be possible only through efforts on a much larger scale than those hitherto made.

#### PROBLEMS OF INCREASING FOOD SUPPLIES

World food supplies can obviously be increased in two ways: by an expansion in the area under food crops and by raising yields per hectare and per animal. In the Far East, pressure of population is generally severe. There is some unused land that may eventually be claimed for agriculture, but in the long run the region will have to depend more on increasing crop yields per hectare than any other area, except perhaps Europe. Yields are extremely low and wide divergencies in rates of production exist among Far Eastern countries. For example, in Japan rice yield per hectare is

Food and Nutrition 45

more than three times as high as in India. Irrigation and the application of scientific practices can do much to lessen this disparity and to raise yields generally. In both the Near East and Latin America, there are large unused but potentially productive lands which can be brought under cultivation. However, this would require heavy capital investment. In both these regions, yields per hectare could be substantially raised by increased mechanization and modern agricultural techniques. In Africa, in all but a few limited sectors, a vast expansion of knowledge and basic services, especially transport, must precede any rapid expansion of production.

The attainment of a substantial increase in livestock production, especially in the underdeveloped regions, remains one of the most important longer-term problems. In most countries of the Far East and Africa, and in many countries of the Near East and Latin America, even if meat production could be doubled or trebled within a reasonable time, consumption would be still far short of the standards which prevail in the more advanced countries of the world. The expensiveness of livestock production in relation to the resources that must be utilized is a formidable and continuing impediment to livestock expansion. When crops are fed to animals instead of directly to human beings, they lose between 80 and 90 per cent of their calorie value before they re-emerge in the form of meat and milk. Some improvement is possible, however, by better practices in animal husbandry. But until food crop production in these regions has been raised to provide a much larger calorie supply than is at present possible, the margin of land and other resources that can be spared for livestock production will remain totally inadequate. Even in Europe, further expansion of livestock output from its present inadequate level will require the most careful utilization of agricultural resources. A more rapid and substantial increase in fish production, however, is both possible and desirable. At present, fish furnishes only about 10 per cent of the world's supply of animal protein. This proportion could be increased, at relatively little cost, without diminishing the existing agricultural resources.

The last few years have witnessed an impressive intensification of large-scale development programmes and research, but the entire scope of the effort must be enormously enlarged if adequate results are to be achieved. Nor can development programmes alone accomplish the task unless the individual farmers, who are ultimately responsible for food production, are convinced by demonstration of the value of the best techniques appropriate to their circumstances. A tremendous expansion in extension and demonstration work is needed if existing knowledge is to have a vitalizing impact at the farm level.

Equally important, farmers and fishermen must be given the incentives needed to increase their output. The provision of adequate transport and other facilities in the rural areas, as well as increased industrialization within their countries, would provide them with a better supply of the goods they need and a readier market for their own products. Price incentives are crucial. Though the postwar rises in wholesale and export prices have been greater in foodstuffs and other

agricultural products than in industrial goods, in many countries the full benefit has not been passed on to the farmer. The prices he has received for food crops have been frequently fixed at much lower levels in order to keep internal prices within the means of the consumer. Upward adjustments of these prices have nearly always lagged behind the prices the farmer has had to pay for the things he needs. At a time when the world's food supply is precarious, the problem of encouraging farm production by incentive prices while protecting the consumer is a dilemma for which no satisfactory solution has yet been found. The situation has been different with industrial crops like cotton, rubber and wool. The farmers who specialize in these crops have received much of the benefit of the very high world prices caused by heavy industrial demand. In some countries, indeed, diversion of both land and labour, formerly used for food crops, to cotton, rubber and the like, is taking place. A continuation of this trend would seriously aggravate the problem of expanding food production.

Whatever the expansion in food production may be over the coming years, it is possible that a large volume of food imports will continue to be needed by fooddeficit countries. Indeed, if expansion is accompanied by increasing industrialization, these needs may well grow. Increased trade within regions—especially within the Far East and between non-dollar countries—may help to meet a great part of these needs, but for some years at any rate dependence on the chief postwar surplus areas is unlikely to be much reduced. Whether the surpluses of these areas will continue on the same scale as in the past few years is open to serious doubt. During postwar years, production in North America has been aided by unusually favourable weather conditions. Rising domestic demand, however, especially for cereals needed for livestock production, is making increasing inroads into surpluses available for export from North America and Oceania. One or two crop failures might, therefore, easily cause a recurrence of critical food shortage in many parts of the world.

Despite the immensity of the problem of raising food production, its solution is possible if all potentially productive resources—land, farm machinery, fertilizers, and modern technical knowledge-can be fully mobilized. This, of course, implies national and international action on the broadest front. The problem is in a sense more urgent than it was in the past. Unsatisfied demand for food has become increasingly vocal. Conditions of famine or widespread hunger are no longer tolerated. That a vast expansion in production is possible has been abundantly proved by the spectacular rise in food production in North America over the past few decades. This achievement has not been fortuitous. On the contrary, in a world with a growing population and a multiplicity of wants which becomes increasingly complex, the advantage lies with nations possessing a large territory under unified economic control where land and other resources are large in relation to population and where modern techniques can be developed and applied without hindrance. In many of the underdeveloped regions, land and potential resources are there, but administrative services have been largely absent and modern techniques have not penetrated to the masses. Moreover, inequitable systems of land

tenure often deprive the cultivator of opportunity and incentive to grow more food.

In other parts of the world, as in Europe, national units have become too small for the expanded populations. Persisting trade and other barriers have resulted in diminishing returns to the point at which economic standards can scarcely be maintained.

#### SOCIAL PROBLEMS OF IMPROVING NUTRITIONAL LEVELS

Apart from the main problem of increasing food production, there are a number of other problems to be faced in improving food consumption and nutritional levels. No balanced improvements can be expected unless the increases in food production are such as to ensure that, within the limits of practicability, enough of the right kinds of foods will be produced and that they will be put to the best nutritional use.

The primary limiting factor in dietary matters, as indicated before, is economic capacity or purchasing power, especially at the lowest economic levels. The field of choice for a population living at subsistence levels is practically negligible since their foremost need is to obtain enough calories, in the form of cheapest energy foods, to relieve their hunger. In such cases, dietary improvement is possible mainly as a spontaneous effect of purely economic development. Only after the minimum requirements are attained, will it be possible to undertake improvements through educational and social development. Where the need is simply for enough food to keep alive, questions of nutritional balance are merely academic.

On the other hand, much can be done to improve the diets of people living at intermediate economic levels. Faulty food habits, arising from deep-rooted tradition and from ignorance, contribute to a large part of prevailing malnutrition. For instance, a serious deficiency disease called beri-beri occurs among millions of Asians and others whose staple food is highly-milled white rice

which has been deprived of the essential vitamins during the excessive milling of the grain.6 Although the solution of the problem obviously lies in avoiding the use of such a form of rice, there are a number of social obstacles. People accustomed to milled white rice do not take kindly to the other forms of rice, such as under-milled and parboiled rices, which are more nutritious but less attractive. Many other examples of social and cultural obstacles can be quoted. Some people have taboos against the consumption of meats, others against fish, eggs and so on. In some cases, the prejudice is not always against the consumption of particular foods but against producing them. For instance, raising vegetables is considered an inferior occupation in some areas and, therefore, is usually undertaken only by immigrants from other areas. Another well-known difficulty in improving diets, which is not always connected with taboo, is related to the popularization of unfamiliar foods. Although it is not insuperable, as shown by recent experience in many countries, it is certainly a slow and difficult process.

#### Conclusion

The foregoing discussion indicates the different aspects of the problem of food and nutrition, which is one of the most formidable on the world social scene. Some of the ways and means to improve the average diet have also been indicated. None of these can be developed, however, without the determination and capacity to carry them out at the national level. More obstacles will be encountered here because the necessary facilities are woefully inadequate in many countries. Moreover, there is the vicious circle of ignorance, poverty and inefficiency which contributed to the backwardness of the underdeveloped areas. This must be broken because the task of raising levels of food supply and nutrition involves simultaneous advances on several fronts, technological as well as social.

<sup>&</sup>lt;sup>6</sup> See p. 28.

 $\begin{subarray}{ll} Appendix $A$ \\ Area, Yield and production of major crops \\ \end{subarray}$ 

|                       |         | Europe             |                    | North and | d Centra           | l America          | Sou     | th Amer            | rica               | Far East |                    |                    |  |
|-----------------------|---------|--------------------|--------------------|-----------|--------------------|--------------------|---------|--------------------|--------------------|----------|--------------------|--------------------|--|
| Commodity             | 1934-38 | Average<br>1946-47 | Average<br>1949-51 | 1934-38   | Average<br>1946-47 | Average<br>1949-51 | 1934-38 | Average<br>1946-47 | Average<br>1949-51 | 1934-38  | Average<br>1946-47 | Average<br>1949-51 |  |
|                       |         |                    |                    | Are       | a: 1,000           | ,000 hectar        | es      |                    |                    |          |                    |                    |  |
| Wheat                 | 29.8    | 25.7               | 28.3               | 33.1      | 39.0               | 38.3               | 8.6     | 7.0                | 6.7                | 36.9     | 40.2               | 36.6               |  |
| Rye                   |         | 11.1               | 12.3               | 1.6       | 1.1                | 1.1                | 0.5     | 0.8                | 0.7                | _        | _                  | 0.1                |  |
| Barley                | 9.4     | 8.5                | 8.9                | 5.7       | 7.3                | 7.1                | 0.9     | 1.3                | 0.9                | 11.6     | 11.2               | 11.6               |  |
| Oats                  | 14.6    | 12.9               | 12.8               | 19.6      | 21.2               | 20.7               | 1.0     | 0.9                | 0.8                | 1.3      | 1.2                | 1.2                |  |
| Maize                 | 11.7    | 11.1               | 10.8               | 41.9      | 39.5               | 39.5               | 10.0    | 8.6                | 8.1                | 13.1     | 13.5               | 14.7               |  |
| Rice (paddy)          | 0.2     | 0.2                | 0.3                | 0.5       | 1.0                | 1.1                | 1.2     | 2.1                | 2.4                | 81.4     | 80.0               | 86.6               |  |
| Potatoes              | 10.0    | 9.0                | 9.3                | 1.5       | 1.2                | 1.0                | 0.6     | 0.7                | 0.8                | 1.1      | 1.3                | 1.3                |  |
|                       |         |                    |                    | Yield     | d: 100 k           | g. per hecta       | re      |                    |                    |          |                    |                    |  |
| Wheat                 | 14.2    | 11.0               | 14.7               | 8.2       | 11.5               | 10.9               | 9.6     | 11.4               | 9.8                | 9.4      | 8.3                | 9.8                |  |
| Rye                   | 14.2    | 11.0               | 14.6               | 7.4       | 7.6                | 7.6                | 6.0     | 6.6                | 5.9                | 6.9      | 6.4                | 7.8                |  |
| Barley                | 15.3    | 13.1               | 16.6               | 11.1      | 12.6               | 13.9               | 9.4     | 11.3               | 11.0               | 11.0     | 10.2               | 10.5               |  |
| Oats                  |         | 13.2               | 15.6               | 9.7       | 11.6               | 12.6               | 11.0    | 9.7                | 9.6                | 8.6      | 7.2                | 8.3                |  |
| Maize                 |         | 10.8               | 14.1               | 13.3      | 19.1               | 21.3               | 15.3    | 15.9               | 12.9               | 11.1     | 10.5               | 10.4               |  |
| Rice (paddy)          | 51.8    | 40.9               | 43.8               | 21.0      | 20.6               | 21.3               | 15.3    | 17.1               | 17.1               | 17.7     | 16.8               | 16.2               |  |
| Potatoes              | 134.6   | 115.2              | 137.0              | 78.5      | 118.3              | 137.9              | 43.6    | 57.9               | 59.0               | 73.0     | 67.9               | 66.4               |  |
|                       |         |                    |                    | Producti  | on: 1,00           | 0,000 metri        | c tons  |                    |                    |          |                    |                    |  |
| Wheat                 | 42.3    | 28.3               | 41.6               | 27.0      | 45.0               | 41.7               | 8.2     | 8.0                | 6.6                | 34.8     | 33.5               | 35.8               |  |
| Rye                   | 19.1    | 12.2               | 17.9               | 1.2       | 0.8                | 0.9                | 0.3     | 0.6                | 0.4                |          |                    |                    |  |
| Barley                |         | 11.2               | 14.8               | 6.3       | 9.2                | 9.9                | 0.8     | 1.4                | 1.0                | 12.8     | 11.5               | 12.2               |  |
| Oats                  |         | 17.0               | 20.0               | 19.0      | 24.6               | 26.0               | 0.9     | 0.8                | 0.7                | 1.2      | 0.8                | 1.0                |  |
| Maize                 | 17.4    | 12.0               | 15.2               | 55.9      | 75.3               | 84.0               | 15.3    | 13.7               | 10.5               | 14.6     | 14.2               | 15.2               |  |
| Rice (paddy)          | 1.1     | 0.9                | 1.3                | 1.2       | 2.0                | 2.4                | 1.8     | 3.5                | 4.1                | 143.8    | 134.6              | 140.2              |  |
| Potatoes              |         | 104.2              | 127.9              | 12.1      | 14.3               | 13.1               | 2.8     | 4.1                | 4.8                | 7.9      | 8.6                | 8.9                |  |
| Sugar beet Sugar cane | 6.5     | 4.8                | 8.2                | 7.0       | 10.6               | 11.5               | 2.5     | 3.7                | 4.2                | 7.3      | 5.0                | 6.4                |  |

|                       |         | Near Ea            | st                 |          | Africa             |                    |         | Oceania            |                    | World   | (excl.             | USSR)              |
|-----------------------|---------|--------------------|--------------------|----------|--------------------|--------------------|---------|--------------------|--------------------|---------|--------------------|--------------------|
| Commodity             | 1934-38 | Average<br>1946-47 | Average<br>1949-51 | 1934-38  | Average<br>1946-47 | Average<br>1949-51 | 1934-38 | Average<br>1946-47 | Average<br>1949-51 | 1934-38 | Average<br>1946-47 | Average<br>1949-51 |
|                       |         |                    |                    | Are      | a: 1,000,          | 000 hectar         | es      |                    |                    |         |                    |                    |
| Wheat                 | 9.5     | 9.1                | 11.2               | 4.8      | 4.4                | 5.1                | 5.3     | 5.6                | 4.7                | 128.0   | 131.0              | 130.9              |
| Rye                   | 0.4     | 0.4                | 0.5                | _        | 0.1                | 0.1                |         |                    |                    | 16.0    | 13.5               | 14.8               |
| Barley                | 4.3     | 5.2                | 5.3                | 3.6      | 2.8                | 3.9                | 0.2     | 0.3                | 0.5                | 35.7    | 36.6               | 38.2               |
| Oats                  | 0.3     | 0.3                | 0.3                | 0.4      | 0.4                | 0.4                | 0.7     | 0.8                | 0.8                | 37.9    | 37.7               | 37.0               |
| Maize                 | 1.3     | 1.6                | 1.6                | 6.6      | 9.1                | 7.7                | 0.1     | 0.1                | 0.1                | 84.7    | 83.5               | 82.5               |
| Rice (paddy)          | 0.8     | 1.0                | 1.0                | 1.7      | 2.3                | 2.6                | _       |                    |                    | 85.8    | 86.6               | 94.0               |
| Potatoes              | 0.1     | 0.1                | 0.1                | 0.1      | 0.1                | 0.1                | 0.1     | 0.1                | 0.1                | 13.5    | 12.5               | 12.7               |
|                       |         |                    |                    | Yield    | d: 100 kg          | g. per hecta       | are     |                    |                    |         |                    |                    |
| Wheat                 | 10.4    | 10.4               | 9.3                | 5.3      | 5.2                | 5.9                | 8.2     | 8.4                | 11.1               | 10.1    | 10.0               | 11.0               |
| Rye                   | 9.6     | 9.5                | 9.2                | 4.5      | 4.7                |                    | 6.7     | 4.6                | •••                | 13.1    | 10.4               | 13.2               |
| Barley                | 9.7     | 7.6                | 9.2                | 5.8      | 5.9                | 6.5                | 9.9     | 12.1               | 11.3               | 11.4    | 10.8               | 12.0               |
| Oats                  | 9.6     | 7.8                | 9.6                | 7.4      | 6.2                | 7.5                | 5.5     | 7.0                | 7.1                | 11.9    | 11.8               | 13.2               |
| Maize                 | 18.6    | 14.7               | 14.9               | 6.7      | 6.4                | 7.1                | 15.1    | 16.0               | 17.5               | 13.0    | 14.8               | 16.1               |
| Rice (paddy)          | 20.5    | 21.4               | 22.6               | 9.4      | 8.1                | 8.8                | 40.0    | 32.2               | 29.0               | 17.6    | 16.9               | 16.3               |
| Potatoes              | _       | 77.1               | 92.8               | 51.9     | 51.8               | 56.3               | 81.6    | 99.3               | 93.8               | 117.6   | 106.2              | 123.0              |
|                       |         |                    |                    | Producti | on: 1,00           | 0,000 metri        | ic tons |                    |                    |         |                    |                    |
| Wheat                 | 9.5     | 9.5                | 10.5               | 2.5      | 2.3                | 3.0                | 4.4     | 4.7                | 5.2                | 128.7   | 131.3              | 144.4              |
| Rye                   | 0.3     | 0.4                | 0.4                | _        | _                  | _                  |         |                    |                    | 20.9    | 14.0               | 19.6               |
| Barley                | 4.2     | 4.0                | 4.9                | 2.1      | 1.6                | 2.5                | 0.2     | 0.4 `              | 0.5                | 40.8    | 39.3               | 45.8               |
| Oats                  | 0.2     | 0.2                | 0.3                | 0.3      | 0.2                | 0.3                | 0.4     | 0.6                | 0.5                | 45.0    | 44.2               | 48.8               |
| Maize                 | 2.3     | 2.3                | 2.3                | 4.5      | 5.8                | 5.5                | 0.2     | 0.2                | 0.1                | 110.2   | 123.5              | 132.8              |
| Rice (paddy)          | 1.6     | 2.2                | 2.2                | 1.6      | 1.9                | 2.3                | 0.1     | 0.1                | 0.1                | 151.2   | 145.2              | 152.6              |
| Potatoes              | 0.3     | 0.7                | 0.9                | 0.5      | 0.7                | 0.8                | 0.5     | 0.7                | 0.6                | 159.1   | 133.3              | 157.0              |
| Sugar beet Sugar cane | 0.2     | 0.4                | 0.4                | 1.0      | 1.1                | 1.4                | 1.8     | 1.4                | 1.9                | 26.3    | 27.0               | 34.0               |

 ${\it Appendix \ B}$  food supplies per capita (at the retail level), prewar, recent and targets

| Region, sub-region and country         | Date                                      | Cereals*          | Starchy<br>roots  | Pulses         | Sugarb         | Fatse              | Fruitsd                | V egetables 4         | Meat*          | Eggs              | Fisht              | Milks                 |
|--|---|-------------------|-------------------|----------------|----------------|--------------------|------------------------|-----------------------|----------------|-------------------|--------------------|-----------------------|
|  |   |                   | (K                | gs. per        | capita pe      | r year)            |                        |                       |                |                   |                    |                       |
| FAR EAST                               |   |                   |                   |                |                |                    |                        |                       |                |                   |                    |                       |
| South Asia                             |   |                   |                   |                |                |                    |                        |                       |                |                   |                    |                       |
| Ceylon                                 | 1934-38<br>1949-50<br>1960 T              | 129<br>102<br>117 | 46<br>37<br>43    | 62<br>62<br>62 | 12<br>16<br>12 | 4<br>6<br>6        | 1<br>1<br>50           | 40<br>40<br>75        | 8<br>3<br>3    | 1<br>1<br>1       | 21<br>16<br>16     | 8<br>10<br>10         |
| India                                  | 1934-38 <sup>h</sup><br>1949-50<br>1960 T | 143<br>119<br>129 | 8<br>7<br>8       | 22<br>20<br>29 | 14<br>13<br>13 | 3<br>3<br>5        | 26<br>25<br>50         | 25<br>16<br>70        | 3<br>2<br>3    | 0.4<br>0.1<br>0.1 | 1<br>2<br>3        | 65<br>45<br><b>50</b> |
| Pakistan                               | 1949-50<br>1960 T                         | 153<br>159        | 5                 | 11<br>13       | 13<br>13       | 2 2                | 31<br>60               | 20<br>80              | 4 5            | 0.3               | 6<br>7             | 73<br>87              |
| East Asia                              |   |                   |                   |                |                |                    |                        |                       |                |                   |                    |                       |
| China                                  | 1934-38<br>1949-50<br>1960 T              | 172<br>153<br>153 | 30<br>36<br>38    | 25<br>22<br>32 | 1<br>1<br>1    | 6<br>7<br>6        | (— 5<br>(— 5<br>40     | 7 —)<br>7 —)<br>90    | 13<br>11<br>16 | 2<br>1<br>3       | 7<br>6<br>8        | -<br>-<br>1           |
| Indochina                              | 1934-38<br>1949-50<br>1960 T              | 144<br>125<br>166 | 18<br>17<br>17    | 5<br>4<br>12   | 7<br>4<br>6    | 2<br>1<br>2        | 48 60                  | 71                    | 14<br>5<br>7   | 3<br>2<br>4       | 6<br>5<br>7        | 7<br>3<br>4           |
| Northeast Asia                         | 1700 1                                    | 100               |                   |                |                | _                  | 00                     | ,0                    | •              | 7                 | ′                  |                       |
| Japan                                  | 1934-38<br>1949-50<br>19 <b>60</b> T      | 168<br>157<br>160 | 63<br>66<br>70    | 8<br>2<br>6    | 14<br>3<br>10  | 2<br>1<br>2        | 16<br>12<br>60         | 79<br><b>66</b><br>90 | 4<br>2<br>4    | 3<br>1<br>3       | 35<br>27<br>45     | 5<br>4<br>7           |
| Pacific Islands and<br>Malay Peninsula |   |                   |                   |                |                |                    |                        |                       |                |                   |                    |                       |
| Indonesia                              | 1934-38<br>1949-50<br>1960 T              | 130<br>120<br>135 | 131<br>118<br>109 | 7<br>8<br>10   | 6<br>2<br>6    | 6<br>6<br>6        | $\frac{16}{40}$        | 44<br>75              | 5<br>4<br>5    | 2<br>1<br>2       | <b>9</b><br>6<br>9 | 1<br>2<br>2           |
| Philippines                            | 1934-38<br>1949-50<br>1960 T              | 127<br>131<br>143 | 26<br>31<br>30    | 17<br>18<br>34 | 13<br>12<br>13 | 6<br>7<br><b>7</b> | 61 80                  | 15<br>—<br>70         | 17<br>14<br>17 | 3<br>3<br>4       | 17<br>14<br>21     | 7<br>9<br>14          |
| NEAR EAST                              | 1700 1                                    | 140               | 30                | 34             | 10             | •                  | 00                     | 70                    | 17             | 4                 | 21                 | 14                    |
|  | 1934-38                                   | 169               | 21                | 11             | 9              | 7                  | 52                     | 26                    | 12             | 2                 | _                  | 06                    |
| Cyprus                                 | 1949-50<br>1960 T                         | 174<br>157        | 30<br>30          | 12<br>13       | 8              | 8<br>10            | 64<br>75               | 26<br>25<br>65        | 17<br>20       | 2<br>2<br>3       | 5<br>7<br>9        | 96<br>95<br>120       |
| Egypt                                  | 1934-38<br>1949-50<br>1960 T              | 182<br>174<br>160 | 5<br>10<br>10     | 21<br>13<br>18 | 10<br>11<br>10 | 3<br>3<br>5        | 36<br>3 <b>6</b><br>73 | 33<br>58<br>108       | 11<br>10<br>11 | 2<br>1<br>2       | 4<br>4<br>4        | 55<br>55<br>65        |
| Iran                                   | 1934-38<br>1949-50<br>1960 T              | 162<br>144<br>162 | 2<br>1<br>8       | 9<br>8<br>13   | 5<br>6<br>6    | 1<br>1<br>3        | 75<br>66<br>100        | 43<br>42<br>75        | 12<br>10<br>10 | 3<br>2<br>2       | 4<br>5<br>9        | 93<br>84<br>83        |
| Iraq                                   | 1934-38<br>1949-50<br>1960 T              | 178<br>148<br>170 | 2 3 3             | 8<br>9<br>13   | 10<br>12<br>11 | 3<br>2<br>3        | 53<br>53<br>80         | 47<br>47<br>75        | 9<br>9<br>11   | 3<br>3<br>4       | 1<br>1<br>3        | 83<br>78<br>85        |
| Palestine-Israel                       |   | 177<br>130<br>130 | 16<br>39<br>50    | 10<br>5<br>11  | 18<br>30<br>20 | 9<br>15<br>14      | 123<br>95<br>102       | 43<br>88<br>90        | 5<br>15<br>15  | 7<br>12<br>20     | 9<br>17<br>17      | 44<br>154<br>155      |
| Syria and Lebanon                      |   | 144<br>128        | 6                 | 12<br>20       | 8<br>7         | 3 6                | 150<br>150             | 48<br>57              | 11 8           | 2 2               | 1 1                | 101<br>86             |
| Syria                                  | 1960 T<br>1960 T                          | 153<br>137        | 20<br>21          | 24<br>24       | 8<br>11        | 7<br>9             | 148<br>175             | 75<br>93              | 7<br>20        | 3<br>4            | 1 3                | 78<br>109             |
| Turkey                                 | 1934-38<br>1949-50<br>1960 T              | 191<br>177        | 3 9               | 8<br>7<br>9    | 5<br>6<br>6    | 3<br>3<br>5        | 98<br>120              | 53<br>65              | 22<br>19       | 3<br>2<br>3       | 5<br>4<br>5        | 151<br>141            |
| AFRICA                                 | 1900 1                                    | 171               | 9                 | 9              | O              | 3                  | 140                    | 93                    | 24             | 3                 | 3                  | 155                   |
| Northern Africa                        |   |                   |                   |                |                |                    |                        |                       |                |                   |                    |                       |
| French North Africa                    | 1934-38<br>1949-50<br>1960 T              | 153<br>142<br>156 | 7<br>8<br>10      | 3<br>3<br>6    | 16<br>11<br>14 | 7<br>4<br>5        | 24<br>20<br>60         | 23<br>23<br>40        | 17<br>11<br>13 | 3<br>3<br>3       | 3<br>2<br>4        | 133<br>84<br>99       |
| Central and<br>Tropical Africa         | 1700 1                                    | 130               | 10 .              | U              | 14             | 3                  | 00                     | 40                    | 13             | 3                 | 4                  | 99                    |
| Belgian Congo                          | 1934-38<br>1949-50<br>1960 T              | 33<br>34<br>49    | 515<br>457<br>451 | 15<br>24<br>33 | 0.4<br>1<br>1  | 3<br>5<br>6        | 40                     | 60                    | 6<br>6<br>7    | 1<br>1<br>2       | 4<br>8<br>8        | 3<br>4<br>5           |
| French West Africa                     |   | 148<br>125<br>146 | 70<br>133<br>123  | 16<br>22<br>22 | 1<br>1<br>1    | <br>6              |                        |                       | 10<br>12<br>14 | 1<br>1<br>1       | 1<br>1<br>2        | 18<br>24<br>30        |

 ${\it Appendix \ B \ (cont'd)}$  food supplies per capita (at the retail level), prewar, recent and targets

| Paris at a si                  |  |                        | Ctanalin                 |                        |                       |                       |                      |                           |                   |                    |                   |                   |
|--------------------------------|--|------------------------|--------------------------|------------------------|-----------------------|-----------------------|----------------------|---------------------------|-------------------|--------------------|-------------------|-------------------|
| Region, sub-region and country | Date   | Cerealsa               | Starchy                  | Pulses                 | Sugarb                | Fatse                 | Fruitsa 1            | Vegetables <sup>a</sup>   | Meat*             | Eggs               | Fisht             | Milks             |
|                                |  |                        | <b>(</b> K               | gs. per                | capita per            | year)                 |                      |                           |                   |                    |                   |                   |
| Kenya-Uganda                   | 1949-50<br>196 <b>0</b> T                    | 58<br>(58)<br>53       | 491<br>(491)<br>430      | 26<br>(26)<br>28       | 5<br>(5)<br>5         | 3<br>(3)<br>4         | 40                   | 5 <del></del> )           | 22<br>(22)<br>25  | 1<br>(1)<br>1      | 0.3<br>0.2<br>0.5 | 54<br>(54)<br>62  |
| Tanganyika                     | 1934–38<br>1949-50<br>1960 T                 | (87)<br>87<br>99       | (306)<br>306<br>303      | (18)<br>18<br>24       | (2)<br>2<br>2         | (1)<br>1<br>2         | (— 2:<br>(— 2:<br>40 | 5 —)<br>5 —)<br>60        | (16)<br>16<br>19  | (1)<br>1<br>1      | 0.4<br>0.3<br>0.7 | (36)<br>36<br>44  |
| Southern Africa                |  |                        |                          |                        |                       |                       |                      |                           |                   |                    |                   |                   |
| Madagascar                     | 1934-38<br>1949-50<br>1960 T                 | 136<br>115<br>127      | 250<br>208<br>197        | 6<br>6<br>7            | 1<br>4<br>4           | 3 2 3                 | 40                   | 5 —)<br>60                | 29<br>28<br>28    | 2<br>2<br>2        | 4<br>5<br>6       | 138<br>136<br>152 |
| Mauritius                      | 1934-38<br>1949-50<br>1960 T                 | (135)<br>135<br>132    | (28)<br>28<br>25         | (6)<br>6<br>9          | (42)<br>42<br>39      | (7)<br>7<br>7         | (34)<br>34<br>39     | ( <b>3</b> 3)<br>33<br>65 | (7)<br>7<br>8     | (2)<br>2<br>3      | (8)<br>8<br>11    | (36)<br>36<br>43  |
| Southern Rhodesia              | 1934-38<br>1949-50<br>1960 T                 | 185<br>176             | 8 9                      | 4<br>6                 | 11<br>11              | 2 3                   | 13<br>40             | 22<br>60                  | 25<br>27          | 1 2                | 2 3               | 60<br>65          |
| Union of South Africa          | 1934-38<br>1949-50<br>1960 T                 | 156<br>153<br>145      | 16<br>18<br>18           | 2<br>4<br>4            | 23<br>39<br>38        | 3<br>4<br>6           | 17<br>24<br>40       | 26<br>35<br>60            | 38<br>43<br>43    | 2<br>2<br><b>3</b> | 3<br>5<br>7       | 75<br>82<br>82    |
| LATIN AMERICA                  |  |                        |                          |                        |                       |                       |                      |                           |                   |                    |                   |                   |
| River Plate countries          | 1004.00                                      | 106                    |                          |                        | 07                    | 10                    | 47                   | 25                        | 107               | -                  |                   | 1.00              |
| Argentina                      | 1949-50<br>1960 T                            | 106<br>125<br>120      | 66<br>87<br>85           | 3<br>2<br>3            | 27<br>35<br>28        | 10<br>17<br>17        | 47<br>58<br>75       | 25<br>39<br>75            | 107<br>114<br>114 | 7<br>7<br>8        | 6<br>5<br>5       | 162<br>164<br>185 |
| Paraguay                       | 1934-38<br>1949-50<br>1960 T                 | 58<br>69<br><b>7</b> 0 | 247<br>249<br><b>220</b> | 30<br>27<br>2 <b>7</b> | 29<br>38<br><b>35</b> | 9<br>7<br>8           | (56)<br>75           | <br>75                    | 118<br>94<br>94   | 3<br>3<br>4        | 0.4<br>0.3<br>0.6 | 129<br>104<br>135 |
| Uruguay                        | 1934-38<br>1949-50<br>1960 T                 | 85<br>100<br>100       | 40<br>34<br>34           | 3<br>2<br>3            | 24<br>28<br>25        | 13<br>12<br>12        | 29<br>40<br>75       | 10<br>14<br>75            | 107<br>107<br>110 | 7<br>8<br>9        | 3<br>2<br>3       | 166<br>183<br>215 |
| Other Latin America            |  |                        |                          |                        |                       |                       |                      |                           |                   |                    |                   |                   |
| Brazil                         | 1934-38<br>1949-50<br>1960 T                 | 78<br>79<br>82         | 46<br><b>75</b><br>75    | 23<br><b>26</b><br>30  | 25<br><b>30</b><br>28 | 6<br><b>6</b><br>7    | 68<br>81<br>85       | 20<br>24<br>75            | 50<br>39<br>45    | 3<br>3<br>4        | 5<br>5<br>5       | 80<br>79<br>90    |
| Chile                          | 1934-38<br>1949-50<br>1960 T                 | 124<br>134<br>140      | 73<br>80<br>80           | 10<br>6<br>10          | 25<br>26<br>26        | <b>5</b><br>6<br>7    | 42<br>41<br>75       | 50<br>54<br>90            | 38<br>38<br>43    | 2<br>2<br>3        | 7<br>12<br>15     | 54<br>69<br>82    |
| Colombia                       | 1934-38<br>1949-50<br>1960 T                 | 57<br>72<br>105        | 87<br>98<br>95           | 7<br>8<br>15           | 40<br>62<br>40        | 3<br>3<br>4           | 132<br>105<br>110    | 10<br>12<br>75            | 26<br>29<br>34    | 4<br>4<br>5        | 0.3<br>1<br>1     | 94<br>145<br>168  |
| Cuba                           | 1934-38<br>1949-50<br>1960 T                 | 102<br>106<br>102      | 99<br>91<br>88           | 13<br>16<br>18         | 40<br>40<br>40        | 9<br>12<br><b>1</b> 2 | 148<br>124<br>135    | 16<br>14<br>75            | 33<br>35<br>42    | 4<br>3<br>5        | 14<br>11<br>12    | 79<br>90<br>105   |
| Mexico                         | 1934-38<br>1949-50<br>1960 T                 | 109<br>123<br>145      | 5<br>7<br>7              | 9<br>10<br>15          | 18<br>26<br>26        | 5<br>6<br>8           | 43<br>58<br>75       | 24<br>75                  | 25<br>23<br>23    | 3<br>2<br>3        | 1<br>2<br>3       | 86<br>71<br>73    |
| Peru                           | 1934-38<br>1949-50<br>1960 T                 | 98<br>103<br>130       | 109<br>122<br>120        | 16<br>7<br>12          | 14<br>22<br>23        | 4<br>4<br>5           | 42<br>43<br>75       | 14<br>14<br>75            | 24<br>23<br>24    | 3<br>3<br>4        | 1<br>5<br>5       | 39<br>36<br>40    |
| Venezuela                      | 1934-38<br>1949-50<br>1960 T                 | 93<br>95<br>105        | 78<br>58<br>55           | 16<br>16<br>25         | 33<br>43<br>43        | 3<br>4<br>8           | 112<br>96<br>100     | 4<br>10<br>75             | 21<br>26<br>28    | 2<br>3<br>4        | 7<br>17<br>17     | 98<br>87<br>98    |
| EUROPE                         |  |                        |                          |                        |                       |                       |                      |                           |                   |                    |                   |                   |
| Western Europe                 |  |                        |                          |                        |                       |                       |                      |                           |                   |                    |                   |                   |
| Belgium/Luxembourg.            | 1934-38<br>1949-5 <b>0</b><br>196 <b>0</b> T | 134<br>110<br>115      | 157<br>134<br>133        | 5<br>2<br>3            | 28<br>26<br>26        | 19<br>19<br>19        | 30<br>71<br>78       | 50<br>53<br>82            | 46<br>45<br>47    | 8<br>13<br>15      | 14<br>17<br>18    | 136<br>130<br>143 |
| France                         | 1934-38<br>1949-50<br>196 <b>0</b> T         | 121<br>126<br>128      | 155<br>131<br>130        | 6<br>3<br>4            | 24<br>22<br>22        | 14<br>12<br>12        | 26<br>34<br>50       | 143<br>143<br>149         | 52<br>54<br>54    | 9<br>10<br>11      | 11<br>12<br>13    | 136<br>137<br>156 |
| Ireland                        | 1934-38<br>1949-50<br>1960 T                 | 131<br>126<br>119      | 195<br>189<br>183        | 1<br>1<br>1            | 38<br>35<br>33        | 14<br>21<br>19        | 20<br>19<br>37       | 53<br>58<br>83            | 55<br>56<br>57    | 16<br>14<br>15     | 6<br>6<br>9       | 149<br>193<br>208 |
| Netherlands                    | 1934-38<br>1949-50<br>1960 T                 | 98<br>94<br>98         | 142<br>176<br>142        | 3<br>2<br>3            | 34<br>36<br>34        | 22<br>23<br>22        | 42<br>53<br>63       | 64<br>62<br>91            | 40<br>29<br>29    | 6<br>5<br>6        | 8<br>12<br>12     | 203<br>219<br>241 |
|                                |  |                        |                          |                        |                       |                       |                      |                           |                   |                    |                   |                   |

 $Appendix \ B \ (cont'd)$  food supplies per capita (at the retail level), prewar, recent and targets

| Region, sub-region and country | Date                         | Cerealsa          | Starchy           | Pulses      | Sugarb         | Fatse         | Fruitsd        | Vegetablesd     | Meat*          | Eggs  | Fishe | Milks           |
|--------------------------------|------------------------------|-------------------|-------------------|-------------|----------------|---------------|----------------|-----------------|----------------|-------|-------|-----------------|
|                                |                              |                   | (I                | Kgs. per    | capita pe      | r year)       |                |                 |                |       |       |                 |
| Switzerland                    | 1934-38                      | 110               | 91                | 2           | 38             | 15            | 86             | 62              | 56             | 9     | 2     | 307             |
|                                | 1949-50                      | 116               | 98                | 2           | 39             | 16            | 78             | 72              | 40             | 9     | 3     | 344             |
|                                | 196 <b>0</b> T               | 116               | 89                | 2           | 37             | 16            | 78             | 80              | 40             | 9     | 5     | 350             |
| United Kingdom                 | 1934-38                      | 94                | 79                | 3           | 46             | 20            | 64             | 49              | 60             | 11    | 24    | 152             |
|                                | 1949-50                      | 105               | 116               | 3           | 39             | 22            | 43             | 55              | 50             | 11    | 27    | 213             |
|                                | 1960 T                       | 104               | 91                | 3           | 38             | 20            | 50             | <b>70</b>       | 54             | 12    | 27    | 235             |
| Northern Europe                |                              |                   |                   |             |                |               |                |                 |                |       |       |                 |
| Denmark                        | 1934-38                      | 94                | 123               |             | 51             | 27            | 33             | 62              | <b>7</b> 5     | 8     | 18    | 195             |
|                                | 1949-50                      | 107               | 140               | 1           | 31             | 19            | 38             | 64              | 65             | 9     | 18    | 221             |
|                                | 1960 T                       | 102               | 122               | 1           | 31             | 19            | 59             | 80              | 65             | 9     | 19    | 246             |
| Finland                        | 1934-38                      | 128               | 181               | 3           | 28             | 13            | 18             | 30              | 33             | 3     | 14    | 276             |
|                                | 1949-50                      | 145               | 184               | 3           | 25             | 12            | 3              | 28              | 27             | 4     | 15    | 271             |
|                                | 1960 T                       | 145               | 182               | 3           | 25             | 13            | 18             | 60              | 27             | 5     | 16    | 285             |
| Norway                         | 1934-38                      | 119               | 131               | 2           | 30             | 25            | 33             | 19              | 38             | 7     | 42    | 207             |
|                                | 1949-50                      | 123               | 127               | 3           | 23             | 25            | 19             | 20              | 31             | 7     | 55    | 301             |
|                                | 1960 T                       | 119               | 122               | 3           | 23             | 25            | 39             | 60              | 31             | 8     | 51    | 326             |
| Iceland                        | 1934-38                      | 120               | 70                | 1           | 44             | 15            | 4              | 18              | 51             | 4     | 129   | 313             |
|                                | 1948-49                      | 105               | 77                | 1           | 35             | 19            | 12             | 15              | 80             | 5     | 118   | 390             |
|                                | 1960 T                       | 108               | 77                | 1           | 34             | 18            | 22             | 46              | 70             | 5     | 116   | 405             |
| Sweden                         | 1934-38                      | 95                | 122               | 2           | 43             | 18            | 37             | 21              | 49             | 8     | 19    | 303             |
|                                | 1949-50                      | 88                | 126               | 2           | 43             | 21            | 39             | 23              | <b>4</b> 8     | 11    | 26    | 306             |
|                                | 1960 T                       | 86                | 118               | 2           | 40             | 21            | 54             | 60              | 46             | 11    | 26    | 322             |
| Eastern Europe                 |                              |                   |                   |             |                |               |                |                 |                |       |       |                 |
|                                | 1934-38                      | 222               | 9                 | 11          | 3              | 8             | 37             | 86              | 22             | 4     | 1     | 103             |
|                                | 1949-50                      | 210               | 7                 | 9           | 10             | 7             | 50             | 88              | 18             | 5     | 1     | 87              |
|                                | 1960 T                       | 192               | 8                 | 13          | 8              | 8             | 58             | 90              | 23             | 6     | 1     | 120             |
| Czechoslovakia                 | 1934-38                      | 130               | 160               | 4           | 24             | 14            | 42             | 41              | 33             | 8     | 5     | 124             |
|                                | 1948-49                      | 139               | 145               | 3           | 23             | 10            | 46             | 65              | 34             | 6     | 7     | 105             |
|                                | 1960 T                       | 140               | 145               | 4           | 23             | 10            | 62             | 85              | 36             | 7     | 7     | 127             |
| Hungary                        | 1934-38                      | 164               | 112               | 7           | 10             | 11            | 49             | 43              | 36             | 6     | 1     | 110             |
|                                | 1949-50                      | 175               | 58                | 7           | 10             | 7             | 32             | 26              | 23             | 3     | 1     | 64              |
|                                | 1960 T                       | 168               | 100               | 10          | 9              | 11            | 62             | 82              | 30             | 4     | 1     | 90              |
| Poland                         | 1934-38                      | 134               | 285               | 9           | 9              | 7             | 31             | 38              | 26             | . 4   | 4     | 135             |
|                                | 1948-49                      | 148               | 240               | 2           | 16             | 6             | 32             | 38              | 19             | . 5   | 4     | 114             |
|                                | 1960 T                       | 149               | 240               | 8           | 14             | 7             | 47             | 70              | 21             | . 5   | 6     | 137             |
| Romania                        | 1934-38                      | 202               | 42                | 7           | 5              | 8             | 75             | 64              | 18             | 5     | 2     | 129             |
|                                | 1949-50                      | 216               | 40                | 5           | 7              | 8             | 75             | 65              | 15             | 4     | 2     | 124             |
|                                | 1960 T                       | 170               | 39                | 7           | 8              | 8             | 77             | 78              | 18             | 6     | 3     | 138             |
| Yugoslavia                     | 1934-38                      | 229               | 55                | 5           | 5              | 6             | 30             | 59              | 23             | 2     | 0.3   | 133             |
|                                | 1949-50                      | 176               | 10                | 4           | 4              | 4             | 30             | 40              | 15             | 2     | 1     | 50              |
|                                | 1960 T                       | 181               | 20                | 6           | 5              | 6             | 39             | 71              | 20             | 3     | 1     | 80              |
| Southern Europe                |                              |                   |                   |             |                |               |                |                 |                |       |       |                 |
| Greece                         | 1935-38                      | 163               | 14                | 12          | 11             | 15            | 53             | 27              | 20             | 4     | 10    | <b>7</b> 5      |
|                                | 1949-50                      | 155               | 32                | 12          | 10             | 14            | 74             | 63              | 12             | 3     | 10    | 58              |
|                                | 196 <b>0</b> T               | 159               | 31                | 15          | 9              | 14            | 77             | 85              | 13             | 5     | 12    | <b>6</b> 5      |
| Italy                          | 1934-38                      | 164               | 37                | 13          | 7              | 11            | 28             | 56              | 20             | 8     | 8     | 74              |
|                                | 1949-50                      | 154               | 32                | 6           | 10             | 9             | 45             | 90              | 18             | 5     | 8     | 79              |
|                                | 1960 T                       | 162               | 36                | 12          | 11             | 13            | 53             | 90              | 20             | 6     | 9     | 90              |
| Portugal                       | 1934-38                      | 103               | 76                | 10          | 10             | 13            | 60             | 80              | 23             | 2     | 30    | 51              |
|                                | 1948-49                      | 120               | 90                | 10          | 12             | 10            | 41             | 72              | 19             | 2     | 31    | 43              |
|                                | 1960 T                       | 150               | 105               | 18          | 13             | 14            | 50             | 84              | 21             | 3     | 32    | 53              |
| Spain                          | 1931-35                      | 146               | 109               | 15          | 12             | 15            | 50             | 100             | 28             | 5     | 25    | 73              |
|                                | 1948-49                      | 126               | 91                | 14          | 9              | 12            | 35             | 115             | 23             | 4     | 18    | 68              |
|                                | 1960 T                       | 141               | 110               | 19          | 9              | 14            | 54             | 117             | 25             | 7     | 19    | 78              |
| Germany and Austria            |                              |                   |                   |             |                |               | ٠.             |                 | _5             |       | .,    | ,,,             |
| Austria                        | 1934-38                      | 138               | <sup>7</sup> 96   | 2           | 24             | 18            | 43             | 58              | 49             | 7     | 2     | 199             |
|                                | 1949-50                      | 137               | 106               | 1           | 21             | 15            | 38             | 60              | 29             | 4     | 3     | 125             |
|                                | 1960 T                       | 142               | 95                | 2           | 22             | 1 <b>7</b>    | 52             | <b>70</b>       | 35             | 4     | 4     | 1 <b>70</b>     |
| Germany (Fed. Rep.).           | 1934-38                      | 113               | 176               | 2           | 24             | 23            | 36             | 50              | 51             | 7     | 12    | 151             |
|                                | 1949-50                      | 120               | 194               | 3           | 23             | 15            | 31             | 43              | 23             | 4     | 19    | 1 <b>0</b> 9    |
|                                | 1960 T                       | 115               | 193               | 5           | 25             | 15            | 50             | 70              | 40             | 7     | 17    | 155             |
| Germany (Democratic Republic)  | 1934-38<br>1949-50<br>1960 T | 113<br>141<br>148 | 176<br>197<br>193 | 2<br>3<br>6 | 24<br>20<br>19 | 23<br>7<br>10 | 36<br>21<br>47 | 50<br>72<br>100 | 51<br>19<br>25 | 7 2 3 | 12    | 151<br>69<br>81 |

Appendix B (cont'd) FOOD SUPPLIES PER CAPITA (AT THE RETAIL LEVEL), PREWAR, RECENT AND TARGETS

| Region, sub-region and country | Date                         | Cereals <sup>a</sup> | Starchy<br>roots | Pulses      | Sugarb         | Fatse           | Fruitsd         | Vegetables <sup>d</sup> | Meate             | Eggs           | Fisht          | Milko             |
|--------------------------------|------------------------------|----------------------|------------------|-------------|----------------|-----------------|-----------------|-------------------------|-------------------|----------------|----------------|-------------------|
|                                |                              |                      | (F               | Zgs. per    | capita pe      | r year)         |                 |                         |                   |                |                |                   |
| NORTH AMERICA<br>AND OCEANIA   |                              |                      |                  |             |                |                 |                 |                         |                   |                |                |                   |
| North America                  |                              |                      |                  |             |                |                 |                 |                         |                   |                |                |                   |
| USA                            | 1934-38<br>1949-50<br>1960 T | 90<br>78<br>78       | 64<br>49<br>45   | 7<br>7<br>7 | 49<br>47<br>43 | 20<br>19<br>17  | 86<br>90<br>105 | 98<br>113<br>123        | 64<br>74<br>76    | 16<br>21<br>21 | 5<br>5<br>5    | 249<br>289<br>319 |
| Canada                         | 1934-38<br>1949-50<br>1960 T | 93<br>71<br>71       | 90<br>94<br>80   | 6<br>7<br>7 | 48<br>51<br>47 | 19<br>18<br>17  | 36<br>45<br>55  | 47<br>64<br>86          | 62<br>69<br>73    | 14<br>17<br>17 | 5<br>7<br>7    | 227<br>244<br>266 |
| Oceania                        |                              |                      |                  |             |                |                 |                 |                         |                   |                |                |                   |
| Australia                      | 1934-38<br>1949-50<br>1960 T | 101<br>94<br>90      | 49<br>53<br>47   | 3<br>5<br>4 | 55<br>57<br>51 | 16<br>14<br>14  | 75<br>80<br>92  | 65<br>71<br>101         | 120<br>108<br>112 | 12<br>12<br>15 | 5<br>4<br>4    | 165<br>201<br>225 |
| New Zealand                    | 1934-38<br>1949-50<br>1960 T | 87<br>90<br>85       | 50<br>49<br>47   | 3<br>3<br>3 | 50<br>52<br>45 | 17<br>15<br>14. | 67<br>55<br>67  | 65<br>65<br>86          | 109<br>96<br>97   | 13<br>13<br>13 | 12<br>11<br>13 | 168<br>240<br>255 |

Appendix C ESTIMATED ENERGY AND PROTEIN CONTENT OF NATIONAL AVERAGE FOOD SUPPLIES PER CAPITA IN RECENT YEARS COMPARED WITH THE PREWAR PERIOD (per capita per diem)

|                                      | Cal    | ories  | Total pro | otein gm. | Animal protein gm. |        |
|--------------------------------------|--------|--------|-----------|-----------|--------------------|--------|
| Country by regions                   | Prewar | Recent | Prewar    | Recent    | Prewar             | Recent |
| FAR EAST                             |        |        |           |           |                    |        |
| South Asia                           |        |        |           |           |                    |        |
| Ceylon                               | 2,140  | 1,970  | 48        | 39        | 9                  | 6      |
| India <sup>a</sup>                   | 1,970  | 1,700  | 56        | 44        | 8                  | 6      |
| Pakistan                             | •••    | 2,020  | •••       | 52        | •••                | 11     |
| East Asia                            |        |        |           |           |                    |        |
| China                                | 2,230  | 2,030  | 72        | 63        | 7                  | 6      |
| Indochina                            | 1,850  | 1,560  | 44        | 36        | 7                  | 4      |
| North East Asia                      |        |        |           |           |                    |        |
| Japan                                | 2,180  | 2,100  | 64        | 53        | 10                 | 8      |
| Pacific Islands and Malaya Peninsula |        |        |           |           |                    |        |
| Indonesia                            | 2,040  | 1,880  | 46        | 42        | 5                  | 4      |
| Philippines                          | 1,920  | 1,960  | 45        | 44        | 11                 | 10     |
| MIDDLE EAST                          |        |        |           |           |                    |        |
| Cyprus                               | 2,340  | 2,470  | 65        | 70        | 11                 | 13     |
| Egypt                                | 2,410  | 2,290  | 76        | 69        | 12                 | 11     |
| Iran                                 | 2,010  | 1,820  | 65        | 58        | 10                 | 9      |
| Iraq                                 | 2,210  | 1,930  | 67        | 60        | 9                  | 8      |
| Israel <sup>b</sup>                  | 2,550  | 2,630  | 73        | 78        | 11                 | 28     |
| Syria and Lebanon                    | 2,040  | 2,000  | 63        | 62        | 10                 | 8      |
| Turkey                               | 2,600  | 2,480  | 92        | 85        | 27                 | 24     |
| AFRICA                               |        |        |           |           |                    |        |
| Northern Africa                      |        |        |           |           |                    |        |
| French North Africa                  | 2,290  | 1,920  | 77        | 65        | 24                 | 16     |

<sup>&</sup>lt;sup>a</sup> Cereals in terms of flour and meal. <sup>b</sup> Includes crude sugars consumed as such.

<sup>&</sup>lt;sup>e</sup> Includes butter; estimates expressed, as far as possible, as pure fats.

d Expressed, wherever possible, in fresh equivalent.

Expressed, wherever possible, in terms of dressed carcass weight.

<sup>&</sup>lt;sup>t</sup> Expressed, wherever possible, in fresh landed weight.
<sup>g</sup> Excludes butter but includes other milk products as fresh milk equivalent.

h Includes Pakistan.

Appendix C (cont'd)

ESTIMATED ENERGY AND PROTEIN CONTENT OF NATIONAL AVERAGE FOOD SUPPLIES
PER CAPITA IN RECENT YEARS COMPARED WITH THE PREWAR PERIOD
(per capita per diem)

|  |        | lories        |        | rotein gm. | Animal protein gm. |            |  |
|--|--------|---------------|--------|------------|--------------------|------------|--|
| Country by regions                     | Prewar | Recent        | Prewar | Recent     | Prewor             | Recent     |  |
| Central and Tropical Africa            |        |               |        |            |                    |            |  |
| Belgian Congo                          | 1,910  | 1,930         | 37     | 42         | 4                  | 5          |  |
| French West Africa                     | 2,030  | 2,070         | 58     | 59         | 6                  | 8          |  |
| Kenya-Uganda                           | 2,330  | •••           | 58     | •••        | 14                 | •••        |  |
| Tanganyika                             | •••    | 1,980         |        | 53         |                    | 10         |  |
| Southern Africa                        |        |               |        |            |                    |            |  |
| Madagascar                             | 2,590  | 2,250         | 65     | 60         | 24                 | 24         |  |
| Mauritius                              |        | 2,230         |        | 46         | •••                | 9          |  |
| Southern Rhodesia                      | •••    | 2,300         | • • •  | 68         | •••                | 16         |  |
| Union of South Africa                  | 2,300  | 2,520         | 68     | 73         | 24                 | 27         |  |
| LATIN AMERICA                          |        |               |        |            |                    |            |  |
| River Plate countries                  |        |               |        |            |                    |            |  |
| Argentina                              | 2,730  | 3,190         | 99     | 102        | 62                 | 66         |  |
| Paraguay                               | 2,700  | 2,670         | 98     | 87         | 60                 | 48         |  |
| Uruguay                                | 2,380  | 2,580         | 90     | 94         | 61                 | 62         |  |
| Other Latin America                    | ,      | ,             |        |            |                    |            |  |
| Brazil                                 | 2,150  | 2,340         | 68     | 64         | 32                 | 26         |  |
| Chile                                  | 2,240  | 2,360         | 69     | 72         | 21                 | 23         |  |
| Colombia                               | 1,860  | 2,280         | 47     | 56         | 20                 | 26         |  |
| Cuba                                   | 2,630  | 2,740         | 64     | 68         | 25                 | 26         |  |
| Mexico                                 | 1,800  | 2,050         | 53     | 55         | 18                 | 16         |  |
| Peru                                   | 1,860  | 1,920         | 56     | 52         | 13                 | 14         |  |
| Venezuela                              | 2,040  | 2,160         | 57     | 60         | 19                 | 23         |  |
|  | 2,040  | 2,100         | 37     | 00         | 17                 | 23         |  |
| EUROPE                                 |        |               |        |            |                    |            |  |
| Western Europe                         |        |               |        |            |                    |            |  |
| Belgium-Luxembourg                     | 3,000  | 2,770         | 89     | 81         | 34                 | 36         |  |
| France                                 | 2,880  | 2,770         | 88     | 99         | 37                 | 40         |  |
| Ireland                                | 3,390  | 3,340         | 99     | 97         | 48                 | 50         |  |
| Netherlands                            | 3,010  | 2,960         | . 76   | 83         | 37                 | 40         |  |
| Switzerland                            | 3,110  | 3,150         | 95     | 95         | 54                 | 50         |  |
| United Kingdom                         | 3,100  | 3,100         | 82     | 92         | 45                 | 49         |  |
| Northern Europe                        |        |               |        |            |                    |            |  |
| Denmark                                | 3,390  | 3,160         | 88     | 99         | 54                 | 55         |  |
| Finland                                | 3,000  | 3,180         | 95     | 102        | 44                 | 46         |  |
| Iceland                                | 3,160  | •••           | 111    | •••        | 74                 |            |  |
| Norway                                 | 3,160  | 3,140         | 86     | 98         | 46                 | 52         |  |
| Sweden                                 | 3,080  | 3,120         | 89     | 93         | 54                 | 58         |  |
| Southern Europe                        |        |               |        |            |                    |            |  |
| Greece                                 | 2,600  | 2,510         | 84     | 80         | 23                 | 18         |  |
| Italy                                  | 2,510  | 2,340         | 82     | 75         | 20                 | 20         |  |
| Portugal                               | 2,110  | •••           | 66     |            | 22                 |            |  |
| Spain                                  | 2,760  |               | 88     | •••        | 25                 |            |  |
| Eastern Europe                         |        |               |        |            |                    |            |  |
| Hungary                                | 2,770  |               | 82     | •••        | 25                 |            |  |
| Poland                                 | 2,710  | •••           | 79     |            | 23                 |            |  |
| Yugoslavia                             | 3,020  |               | 95     | •••        | 22                 |            |  |
| Germany and Austria                    | •      |               |        |            |                    |            |  |
| Austria                                | 2,990  | 2,620         | 84     | 75         | 40                 | 27         |  |
| Germany (Fed. Rep.)                    | 2,960° | 2,640         | 83°    | 78         | 40°                | 30         |  |
| Germany (Dem. Rep.)                    |        | 2,460         | •••    | 72         | •••                | 19         |  |
| NORTH AMERICA AND OCEANIA              |        |               |        |            |                    | -          |  |
| Canada                                 | 2.070  | 2.060         | 85     | 92         | 40                 | F7         |  |
|  | 3,070  | 3,060         |        |            | 48                 | 57         |  |
| USA.                                   | 3,150  | 3,130         | 89     | 90         | 50                 | 60         |  |
| Australia                              | 3,300  | 3,160         | 103    | 95         | 67                 | 65         |  |
| New Zealand                            | 3,260  | 3,250         | 96     | 96         | 64                 | <b>6</b> 5 |  |
| * Includes Pakistan for prewar period. |        | ° 1936 bounda | aries. |            |                    |            |  |
| Prewar data are for prewar Palestine.  |        |               |        |            |                    |            |  |

# Chapter V

## HOUSING

#### Introduction

There is no country without a housing problem. As a result of the rapid urbanization of modern times, combined with general population increases, as well as war devastation and economic depression, the housing situation is considered to have deteriorated in most parts of the world in comparison with prewar years. According to rough estimates, as many as 150 million families in the less-developed areas may require more adequate homes in better physical surroundings; and in the industrially advanced countries the housing deficit is roughly estimated to amount to more than 30 million family-dwelling units. There are however, tremendous differences between the less-developed and the moredeveloped countries of the world not only with regard to the quality and quantity of housing available but also with regard to the nature of the housing problems involved.

In the more-developed countries, the common problem is that of developing an industry capable of building more adequate homes for lower-income groups. Where large-scale production of housing has been introduced, standardization of building processes and mass manufacture of structural and other elements have rendered house building more efficient. However, this has not generally been reflected in lower costs or lower rents, because of rising costs of materials and labour. In addition, standardization associated with large-scale production has tended in some cases to stratify communities on the basis of occupation and income.

Lacking the economic resources and the technological means available to the more-developed countries, the less-developed areas are particularly ill-equipped to cope with the housing problem. In these areas, where most houses are built by their occupants, it is considered that practical measures for the improvement of the housing situation must take advantage of local initiative and resourcefulness combined with the rational application of local materials and skills.

While the present chapter is concerned primarily with the physical problem of the availability of housing, it should be borne in mind that bad housing is associated with basic social ills, such as disease, delinquency and other forms of social maladjustment.

# Housing conditions in the more industrialized countries

Housing conditions in the economically moredeveloped countries have followed a common pattern. Whenever industrialization has proceeded at a rapid pace, the movement away from the countryside to cities and to new production centres has intensified the urban housing shortage.

# European housing

The housing problem in much of Europe, though seriously aggravated by two world wars and a period of economic depression, has its roots in the industrialization and the enormous population increase of the nineteenth century, an increase which was largely confined to urban areas, and which resulted in an expanding demand for housing accommodation. This demand was seldom satisfied in terms of quantity, and the quality of housing, because of extreme overcrowding and thoroughly insanitary living conditions, was below any accepted standards. Measures were taken in nearly all European countries from about 1850 to improve housing conditions, but they were generally of a piecemeal nature and not comprehensive enough to resolve the problem. The present European housing situation developed against this nineteenth century background. As stated by the Housing Sub-Committee of the Economic Commission for Europe, the housing shortage is a "deep-rooted social and economic problem, aggravated by the war but essentially of a long-term character".1

The present-day housing problem has four aspects, namely: (a) how to wipe out the deficit of a century's underbuilding, (b) how to restore losses caused by two world wars and a major economic crisis, (c) how to replace obsolescent and unhealthy dwellings, and (d) how to organize a regular supply of new dwellings to take care of the population increase. These goals call for production levels vastly beyond those realized in the past by the building industry. Promotion of an adequate level of house building is, therefore, coming more and more to be regarded in many European countries as the responsibility of governmental bodies and of semi-public agencies.

While at first governments took an interest in housing from the point of view of health standards, they were later compelled to focus their attention on the economic and financial aspects of housing, as the failure to satisfy the needs of the large and growing working population for housing, at rents which they could afford, became increasingly evident. Various forms of government intervention became discernible, such as the building of houses by the State itself and the provision of assistance through the medium of subsidies and through general financial policy. Housing policy, minimum construction standards and town-planning legislation were a corollary to these new responsibilities of governments.

Another factor of vital importance affecting the housing situation has been the structure of the building

<sup>&</sup>lt;sup>1</sup> Economic Commission for Europe, Industry and Materials Committee, Housing Sub-Committee, Report of the Fifth Session, Geneva, 19 to 22 March 1951, resolution on the "European Housing Situation and Outlook", United Nations document E/ECE/IM/HOU/37, 27 March 1951, p. 13.

industry itself. This structure is currently changing under the impact of new conceptions of industrial technique which in turn have a fundamental influence on productivity in house construction. But the backwardness of the building industry as regards technology and organization remains one of the major causes of the growing discrepancy between housing and community needs, on the one hand, and the building industry's output and potentials, on the other hand.

In order to appraise European housing needs, the years between the two world wars must be recalled, when "slum conditions and community blight were . . . growing worse and more widespread. Even countries at the height of industrial development were unable to provide increasing numbers of people with decent and livable homes at prices they could afford . . . and Europe's urban populations were drifting from bad to worse housing conditions. As a consequence, an accumulated deficit of 123/4 million dwelling units, inherited from prewar 'normalcy' is now accentuating the danger to health and safety of a great many millions in countries devastated by the [second world] war. Moreover, Europe never built enough housing for the current needs of new families and for the replacement of dwellings obsolete because of age".2

A first attempt to assess the housing needs and programmes in seventeen European countries with a combined population of 242 million (or 43 per cent of Europe's total) disclosed that in 1939 the average number of rooms per dwelling unit varied from two (Greece) to nearly five (the United Kingdom, excluding Scotland).3 The number of inhabitants per room averaged from about three for every four rooms (the United Kingdom, excluding Scotland) to more than two per room (Hungary). In the last few years before the war, 824,000 dwellings per annum were constructed on the average in these countries, representing 13/4 per cent of the total existing building wealth4 in 1939.

War destruction accounted for 73/4 per cent of the total building wealth, varying from nil (Denmark, Sweden, and Switzerland) to 203/4 per cent (Greece) and 21½ per cent (Poland). A total of 5½ million dwelling units were totally or partially destroyed and unfit for habitation at the end of the war, and families occupying about 8½ per cent of the building wealth in the seventeen countries analysed were homeless on account of war damage alone. This loss represents six years of house construction at the prewar rate.

A comparison of the housing situation at the end of 1947 with that in 1939 revealed that, after making allowances for changes in population, more than 3 million additional dwellings were required to return even to the prewar housing standard. Furthermore, another

<sup>2</sup> United Nations, Housing and Town and Country Planning, "Grave Deficit of Dwellings in Postwar Europe", Bulletin No. 1, November 1948.

prewar dwelling units in existence at a given time.

11 million dwellings were needed, representing more than 17 per cent of the prewar building wealth, to raise the level of housing in the seventeen countries to a reasonable minimum by replacing insanitary and unsafe dwellings and relieving overcrowding.5

In order to meet the essential current housing demand arising from annual increases in population and from replacement needs on account of obsolescence, it appeared (in 1947, for the seventeen countries analysed) that nearly one million additional dwellings were required each year. The conclusion was reached, therefore, that even if the prewar rate of house construction were to be doubled (from about 800,000 to 1.6 million dwelling units), it would take, on an average, twentytwo years to meet housing needs, varying from six years in the case of Sweden to more than 150 years in Greece. Recent progress in the construction of houses in selected countries of Western Europe is indicated in table I.

# Eastern Europe

While the foregoing analysis is broadly representative of the housing situation in many Western European countries, the trends in Eastern Europe, where industrialization began later, have followed a somewhat different pattern in the postwar period. In the Union of Soviet Socialist Republics, "the concentration of productive resources on industrial development under the prewar Five Year Plans necessarily entailed heavy sacrifices for consumption, including the standard of housing. The problem was aggravated by the fact that industrial growth brought with it a strong migration from the countryside to the cities6 . . . During the war housing received a tremendous setback, both through the curtailment of construction and through extensive war damage. Official estimates placed the wartime destruction at 1.2 million out of a total of slightly less than 2.6 million urban dwelling units in the devastated areas and 3.5 million out of a total of 12 million rural houses; it was further estimated that urban areas required 60 million square metres of living space for rehabilitation".7

"The [first USSR postwar] Five Year Plan . . . differed from its predecessors in providing for an extensive building programme; repairs and construction of urban dwellings during the period 1946 to 1950 amounted to about 100 million square metres, or considerably more than the Plan figure of 84.4 millions, although in the rural areas the construction of 2.7 million houses was about one-fifth less than the objective set for the period. In 1951, according to provisional totals . . ., urban construction was further developed, but rural housing continued to lag behind schedule, completions during the year were about the same in both categories as in 1950 and smaller than they had been in 1948. Wartime losses (but not the ten-years'

\*\*Thotal Strain Committee Strain Committ

<sup>&</sup>lt;sup>3</sup> Economic Commission for Europe, *The European Housing Problem—A Preliminary Review*, United Nations document E/ECE/110, 1 October 1949. The countries considered were: Austria, Belgium, Czechoslovakia, Denmark, Finland, France, Hungary, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Sweden, Switzerland, United Kingdom. The Union of Soviet Socialist Republics was discussed separately.

4 The term "building wealth" denotes the total number of

<sup>&</sup>lt;sup>5</sup> Economic Commission for Europe, op. cit., p. 8, paras. 19-20.
<sup>6</sup> Between 1926 and 1939 rural population (in the USSR) decreased from over 120 to 114½ millions, while urban population rose from 26¼ to nearly 56 millions. The number of cities with over 100,000 inhabitants increased from 31 to 82 in the years 1926-36. Cf. Planned Economy (Planovoye Vibermitten) no. 6, 1030

Table I

THE EUROPEAN HOUSING SITUATION IN 1939 AND 1947 AND THE BUILDING PROGRAMMES THROUGH 1954

(in thousands of dwelling units and persons per dwelling unit)

| Country        | Total<br>number of<br>existing<br>dwelling<br>units<br>(building | Total<br>number of<br>existing<br>dwelling<br>units<br>(building | Replace-<br>ment<br>needs at<br>the end<br>of 1947 | Actual or estimated number<br>of dwelling units built in |         |      |      |      | Number of dwelling<br>units planned or<br>anticipated |      |      |      | Number of<br>inhabitants<br>per dwelling<br>unit |      |
|----------------|--|--|--|--|---------|------|------|------|---|------|------|------|--|------|
|                | wealth)<br>in 1939   | wealth)<br>in 1947   |  | 1939   | 1940-47 | 1948 | 1949 | 1950 | 1951  | 1952 | 1953 | 1954 | 1939   | 1947 |
| Austria        | 2.050  | 2,008  | 418  |  | 10      | 13   | 13   | 21   | 23  | 25   | 27   | 28   | 3.3  | 3.5  |
| Belgium        | 0,500  | 2,815  | 181  |  | 0       | 18   | 24   |      |   |      |      |      | 3.3*   | 3.0  |
| Denmark        |  | 1,240  | 170  | 21   | 12      | 20   | 24   | 22   | 20  | 20   | 20   | 20   | 3.3*   | 3.4* |
| Finland        | 7/0  | 855  |  | 21   | 11      | 33   | 33   |      |   |      |      |      | 4.6  | 4.5  |
| France         |  | 12,340   | 3,150  | 57   | 0       | 22   | 51   | 70   |   |      |      |      | 3.2  | 3.3  |
| Ireland        |  | 615  | ·  | 10   | 6       | 2    | 7    | 11   | 12  | 12   | 12   |      | 4.6  | 4.8  |
| Italy          |  | 10,216   | 2,170  | 43   | 8       | 22   | 30   | 60   |   |      |      |      | 4.2  | 4.5  |
| Netherlands    |  | 2,072  | 245  | 30   | 10      | 36   | 43   | 48   | 50  | 55   | 58   | 60   | 4.0  | 4.5  |
| Norway         | HO.  | 736  | 85   | 16   | 9       | 16   | 18   | 22   | 17  | 18   | 18   |      | 4.0*   | 4.3* |
| Sweden         |  | 2,220  | 450  | 59   | 40      | 48   | 42   | 45   | 48  |      |      |      | 3.3  | 3.1  |
| Switzerland    | 1,111  | 1,205  | 9  | 12   | 12      | 26   | 20   | 23   | 17  | 15   | 15   | 15   | 3.8  | 3.8  |
| United Kingdom | 13,144   | 13,104   | 2,444  | 356  | 65      | 251  | 205  | 207  | 209   | 211  |      |      | 3.6*   | 3.6* |

Source: United Nations document IM/HOU/33, pp. 1, 2.

obsolescence in the remaining stock of houses for the country as a whole) have thus been more than made good for the urban areas and have been met to the extent of nearly 90 per cent in the countryside. In the meantime, however, the total population of the country, on a comparable territorial basis, has risen by about 5 per cent from 1940 to the end of 1951, and that in urban areas probably by as much as 30 per cent."8

In other East European countries war destruction also accounted for a considerable loss in dwelling units and ranged from an estimated 3.5 per cent in Czechoslovakia to 21.5 per cent in Poland, in terms of prewar building wealth. Under the short-term economic plans implemented in these countries in the immediate postwar years, considerable housing construction took place, mainly in urban and industrial areas. In Poland, the number of habitable rooms in urban areas was increased by 1,100,000 during the period 1946-50, and by the end of 1951 the average number of persons per room was reduced to 1.6 (as compared to 2.0 in prewar).9 In Yugoslavia some 345,000 damaged dwellings were rendered habitable in the first two years after the war, and in 1949 the building of approximately 85,000 dwelling units was started.10

# Housing policies in Europe

The foregoing analysis of housing needs and programmes shows that progress in house construction was made since the war throughout Europe. The Economic Commission for Europe, at its seventh session in 1951, noted, however, that "despite progress in the rate of house construction... since the war, the fact remains that most countries have failed to keep pace with the current needs of their growing populations or to meet the housing problems arising from the shift of population from rural to urban areas. No country has, therefore, been able to make any significant contribution to satisfying the backlog of unfulfilled needs...

8 Ibid., p. 133.9 Information transmitted by the Government of Poland.

In most countries, there is no evidence of a significant increase in the productivity of the building industry, and the level of real costs of building continues, therefore, to be a cause of concern".<sup>11</sup>

In order to overcome the persistent housing emergency or to reduce it to manageable dimensions, various policies have been adopted in Western Europe.<sup>12</sup> At the beginning of the century a large proportion of new houses were built by private enterprise for rental purposes. House-building is now undertaken primarily by non-profit-making bodies—usually under the supervision of the public authorities and in many cases by the public authorities themselves-or else by persons wishing to build their own homes. At times building is carried on almost exclusively by public bodies. "The erection of dwellings with a view to letting them at profit is everywhere on the decline; indeed, in some countries it is non-existent or has almost completely disappeared."13 In general, it can be stated that the construction of as many houses and dwelling units as have been built in the face of war and postwar obstacles has been possible only by a markedly increased reliance on public resources and government activity. This trend is considered likely to continue and perhaps to increase.

In housing policies and practices the tenant's right to the occupancy of his dwelling represents a factor of major importance. Fifty years ago tenants generally enjoyed only a somewhat precarious right of occupancy, based on their lease, which was almost always a short one; the landlord was free to oust the tenant on expiry of the lease without giving any reason. Tenants have striven by various means to gain security of occupancy

<sup>10</sup> Information transmitted by the Government of Yugoslavia.

<sup>&</sup>lt;sup>11</sup> Economic Commission for Europe, seventh session, Reports from the Committee of the Commission, United Nations document E/ECE/142, annex I, p. 1, 28 January 1952.

<sup>&</sup>lt;sup>12</sup> The following paragraphs apply mainly to member countries of the Organisation of European Economic Co-operation.

<sup>13</sup> ECE Housing Sub-Committee, Methods and Techniques of Financing Housing in Various European Countries, United Nations document IM/HOU/WP.11, 12 October 1951, p. 19.

and have obtained at least partial satisfaction through the introduction of legislation.

The main result of this desire for more secure tenure, however, was to swell the number of persons wishing to own their own dwelling; and the difficulties often encountered nowadays in finding rentals, tends to increase still further the number of candidates for ownership. "The majority of States have encouraged this tendency for various political, social and sometimes merely financial reasons . . . and it became necessary in the case of individually-owned homes, to organize financing systems by which almost the entire amount required to cover the building costs could be advanced on a long-term basis . . . and in the case of rental housing to restrict the owner's right of free disposal."14

In addition to systems of individual ownership and ordinary tenancy, other housing practices have developed. The tendency to own a flat or a whole floor of a building is gaining ground today in countries such as Austria, France, Italy and Western Germany. Under this system, individuals acquire a personal right to one particular flat or floor and are co-proprietors of the project. There are also "owners' co-operatives" in which the construction is carried out by co-operative societies, whose members gradually acquire individual ownership of their dwellings by payment of an annual instalment. "Tenants' co-operatives" are very common in the Netherlands, Switzerland and the Scandinavian countries. Under this system, the tenant, while never becoming the individual owner of his dwelling, takes part in the administration of the co-operative and generally enjoys, legally or in fact, a right of permanent occupancy.

Housing policies in Western Europe have concentrated upon measures designed to reduce the cost of housing to the consumer. Governments have achieved this goal by various means, such as controlling rents and selling prices, or giving direct financial assistance to the builder, owner or occupant.

Housing policies and practices in Eastern Europe have followed a markedly different course. New trends became discernible after the First World War in the USSR when the State nationalized all privately-owned urban housing that was used for rental purposes. In this way, accommodation was provided for homeless families in houses and apartments considered as not fully utilized. At the same time, "the personal ownership for use, in the main, of small houses, was . . . encouraged".15

Housing production was carried out mainly by local Soviets, housing co-operatives, industrial, commercial and agricultural undertakings. The dwellings erected by the housing co-operatives, financed to the extent of nine-tenths by State loans, became the joint property of their occupants. In 1937, the housing co-operatives, with a few exceptions, were dissolved. Among the reasons given for this decision was the fact that the co-operative housing system tended to make the population too static at a time when mobility of labour was

a prime factor in the rapid industrialization of the country.16

This approach gradually led to the view that housing is fundamentally a tool of industry. Each industry is, therefore, in principle, responsible for the housing of its own workers. Also, the provision of dwelling units forms part of the labour contract and is the special concern of the trade unions. Under the first postwar Five Year Plan (1946-50), the responsibility for new urban building was distributed as follows: 77 per cent was carried out by industrial, commercial and governmental organizations for their own personnel; about 9 per cent by local Soviets; and 14 per cent by individuals.17 In the rural areas, building is carried out either by collective farms or by the farmers themselves, usually by means of permanent construction brigades.

# Housing costs

In the Western European countries, it has been estimated that the cost of building a working-class dwelling represents, on an average, about fifty times the monthly income of a family with two children. When the cost of the site is added, as well as the financial charges involved (loans, etc.), the total sum would require annual repayment equal, on an average, to three or three and a half months' income, assuming that the total sum was borrowed at a rate of 5 per cent, repayable in thirty years. This would not include maintenance costs, taxes and similar charges on a house.<sup>18</sup> It need hardly be stressed, therefore, that current "construction costs are too high in comparison with the consumer's buying power. Indeed, if rents were calculated with a view to an adequate return on investment based on actual postwar construction costs, housing demand would collapse".19

It might be noted in this connexion that in Western and Northern Europe wartime rent controls are maintained. As a result, while income, wages and cost of living have sharply risen, rents have been kept to near the prewar level and have formed a decreasing proportion of the average wage earner's budget. The level of rents that governments in Western Europe have considered "socially justifiable"—generally about 20 per cent of family income—is not sufficient to meet the cost of new housing. In other words, the recognition that house property no longer offers a sufficient return, has led to the increasingly important role which governments and ad hoc financial agencies are playing in house construction.

In the USSR, where rents for all dwellings are fixed by governmental bodies and where, in general, rents—inclusive of the additional charges— "account for not

<sup>16</sup> ECE Housing Sub-Committee, Methods and Techniques of Financing Housing in Various European Countries, United Nations document IM/HOU/WP.11, p. 290.

<sup>18</sup> Cf. ECE Housing Sub-Committee, An Attempt to Com-<sup>18</sup> Cf. ECE Housing Sub-Committee, An Attempt to Compare the Construction Cost of a Working Class Dwelling Unit in Different Countries, United Nations document IM/HOU/WP.2/18, 4 January 1952, pp. 6-8; conclusions are based in investigations covering Belgium, Denmark, Finland, France, Italy, Norway, Netherlands, Sweden, Switzerland, United Kingdom and Western Germany.
<sup>19</sup> ECE Housing Sub-Committee, Measures to Reduce Building Costs, United Nations document IM/HOU/WP.2/15, in French, 16 January 1952, pp. 7-8.

<sup>14</sup> Ibid., p. 20.

<sup>&</sup>lt;sup>15</sup> E. M. Chossudovsky, "The Development of Housing in the USSR", Housing and Town and Country Planning, Bulletin no. 5, pp. 81-93.

more, and frequently much less, than 10 per cent of an average family budget",20 it has been stated that rent levels are too low to cover over-all expenditure for housing.21

The Economic Commission for Europe, on the basis of a recent study, made the following statement: "While in most industrial sectors technical progress has brought about a considerable lowering of actual prices (of goods and services) over the last fifty years, this has not happened in the building industry, and the advance in the average standards of new dwellings intended for the masses has not been offset by a corresponding reduction in prices . . . While building costs have risen more steeply than other consumption expenditure . . . the proportion of the total consumption expenditure represented by housing has dropped almost everywhere. Thus the recognition that housing, especially workingclass housing, is a poor speculation for private capital as compared with the yield from other sectors [led to] the intervention of the public authorities. It had the further effect . . . in most countries over the last fifty years of reducing the number of houses built for letting by private individuals".22

The shortage of capital available for investment in building has resulted in the development of specialized financing organizations which have taken a variety of forms; often they are semi-state concerns, or actual government departments. Financial assistance by public authorities enters in one way or another into most of the new dwelling construction and represents a fairly large proportion of funds invested in house building. Methods employed are mostly based on provision of loans, subsidies and guarantees. 23

Similar trends toward large-scale production are evident in Eastern Europe. New building enterprises or groups of enterprises of large size have been created, such as the construction departments of a number of ministries in the USSR, or the National Building Trust in Czechoslovakia. In Poland, large-scale production of apartment houses, based on standardization of structure and on prefabrication, is favoured as a means not only of reducing costs but also of providing social services and community facilities more readily.

### Industrialized countries outside Europe

The United States, with a population that is 85 per cent urban and highly mobile (according to the 1950 census one person in five changes his residence each year) has an over-all housing shortage the local intensity of which varies with the development of new industrial centres. It is estimated that the United States will require a million and a half additional dwelling units each year for a period of more than ten years if current needs are to be filled and accumulated deficits eliminated, and substandard units are to be replaced.24

20 E. M. Chossudovsky, op. cit.

Annual construction of new permanent non-farm dwelling units has fluctuated very widely over the past quarter century, but has not yet reached this figure in any one year. From a peak of 937,000 units in 1925, construction fell to 93,000 in the depression year of 1932, rose to 706,000 in 1941, fell again during the war years 1942-45, then rose to 1,396,000 in 1950. In 1951, however, due to restrictions in the use of building materials and limitations on real estate credit, construction declined to 1,094,000 new non-farm dwelling units.<sup>25</sup> Construction of the great majority of these dwelling units was privately financed; public funds accounted for only 44,000 units in 1950 and 71,000 in 1951. The federal government, however, has been increasingly active in the housing field since 1932, not only through the provision of low-cost housing for families unable to afford decent accommodation, but through loans and mortgage guarantees to stimulate private construction and individual ownership of housing, advances for the development of community services and facilities (water and sewage systems, schools, streets, etc.), and other measures. Rents have generally risen more slowly than the cost of materials and of labour, and the cost of living in general. A trend toward increased home ownership has been stimulated during the past decade by prevailing high income levels and the relative scarcity of rental housing; by 1950, 53 per cent of all homes were owned by their occupants.

Other industrialized countries outside Europe report housing shortages of varying degrees of urgency. The problem in Japan, for example, was greatly intensified during the war. Thus, despite the large number of units that have been constructed since the war (2,500,000), one-fifth of the Japanese population is still seeking adequate accommodations. The deficit as of 1950 was reported as more than 3 million units.26 With Japanese incomes too small to pay for new houses, practically no private building is carried out for rental purposes. Housing for low-income groups is being constructed with the aid of government subsidies, the National Treasury contributing 50 per cent of the cost of houses erected by local building societies as well as long-term loans to cover the balance.

In recent years, in most industrialized countries outside Europe, there has also been a marked trend toward large-scale production, although its share in the total volume of building is still relatively low. Three factors appear to have contributed to this trend: the intensive demand for housing in large urban centres has stimulated large-scale operations; public housing projects have been, in the majority of cases, conceived and produced on a relatively large scale; and, in recent years, organizations disposing of large funds have extended their operations to the financing of housing construction.

Countries in which immigration has been high in relation to the existing population have been faced with particular housing crises and have often been forced to lodge many immigrants in temporary barracks

<sup>26</sup> General Headquarters, Supreme Commander for the Allied Powers, Public Health and Welfare Section, Public Health and Welfare in Japan, Annual Summary, 1950, p. 60.

<sup>&</sup>lt;sup>21</sup> United Nations document IM/HOU/WP.11, p. 300.

<sup>&</sup>lt;sup>22</sup> Ibid., pp. 29-32.
<sup>23</sup> "Building by direct labour by the State itself is rarely practised. On the other hand, the local authorities are responpractised. On the other hand, the local authorities are responsible for a great deal of building of this kind in certain countries". (About 80 per cent in the United Kingdom, 30 per cent in the Netherlands.) *Ibid.*, pp. 61-71.

24 Raymond M. Foley, "Evolution of the United States Housing Programme", *Housing and Town and Country Planning*, Bulletin No. 3, February 1950, p. 7.

<sup>&</sup>lt;sup>25</sup> Housing and Home Finance Agency, *The Housing Situation—The Factual Background*, Washington, D.C., June 1949, p. 35; United Nations, *Statistical Yearbook* 1951, p. 268; and 1951 estimates from the United States Department of Labor.

or camps. This has been especially true of Israel, where the population has more than doubled in the last three years.

Housing conditions in less-developed areas<sup>27</sup>

For the underdeveloped areas—where the greater part of the world's populations live and where housing conditions are poorest—there is almost no quantitative information at all to describe housing needs. In fact, because of differences in climate, community life, social structure, and nature and size of family, certain quantitative measures—such as space available per family which have been devised to gauge housing conditions in the industrialized countries of the temperate zone, would hardly produce comparable results if applied to many less-developed areas. Housing is an adaptation to total physical and social environment and must be assessed in terms of that environment. To take an extreme example, the housing problems and needs of nomadic tribes are obviously quite different from those of sedentary societies. In areas where social life is highly communal in nature, the village long house or other community house may serve functions that are elsewhere served by space in private dwellings. While housing is determined by existing circumstances in a given environment, it is also true that in all environments the existing housing in turn determines other circumstances: in particular, bad housing anywhere perpetuates disease and unhealthy social conditions.

# Urban housing

The more conspicuous housing problems of the lessdeveloped areas derive from the rapid expansion of their cities in recent years. Industrialization, migrations of peasants unable to support themselves on the land, and, in some areas—particularly of Asia—floods of refugees, have resulted in a mushroom-growth of city slums comparable to that accompanying the nineteenth century Industrial Revolution in Europe. The typical working-class family in most cities of Africa, Asia, and large parts of Latin America lives in a single room, frequently with no private cooking, bathing, or toilet facilities. The cities which have grown most rapidly are usually surrounded by slum suburbs of huts built of scrap material by their occupants—frequently squatters -and lacking even the most rudimentary system of water supply or sewage disposal. Often these huts are built by peasant migrants after the manner of their former rural dwellings which, inadequate enough in the countryside, are wholly unsuited to the congested conditions of urban life.

Many of the cities in question have minimum housing regulations but have been unable to enforce them or to provide better housing for the slum populations. In general, the incomes of the latter are too low to permit them to pay rents bearing any close relation to the costs of adequate housing. When low-cost housing is built it is thus likely to be occupied only by the best-

paid workers and lower middle-class groups, and to have no appreciable effect on the slums. In most cases, government resources available for housing and slum clearance have been small. Several governments have been compelled to relax legal standards of housing in order to bring legislation into closer accord with existing realities and with the country's economic resources.28

# Estate housing

In many of the countries in question, for example, in Southeast Asia and in the Caribbean region, there are important aggregations of population employed and housed by large-scale plantation or mining enterprises. These aggregations often differ in important respects from other urban and rural communities. Estate housing is frequently associated with dingy bachelor barracks, little consideration being given to the needs of the worker as the head of a family. Housing on many plantations consists of single rooms, usually built in rows of varying lengths. A number of families are crowded together under the same roof separated only by thin partitions. A building may contain twenty or more such dwelling units. In most of these "lines", the flimsy partitions dividing the units do not reach the roof, with the result that not only has the family no privacy, but smoke, noise, dirt and infection, pass from one unit to another. Moreover, these units usually contain no facilities for cooking, bathing, washing, or storing of family possessions. The living space is extremely small, and adults and children sleep side by side in a row. Water and primitive sanitary facilities are in most cases available at one place only for the whole community.29

Recently, there is evidence of a trend to deal with the housing problems of the worker on a long-term contract by facilitating the establishment of a normal family life in suitable surroundings. The building of family dwelling units is becoming a well-marked trend. In many instances, governments have enacted regulatory measures requiring (either by statute or by collective agreement) that the employer provide suitable housing for his workers or appropriate payment in lieu thereof.

The assumption by the employer of the responsibility for domiciling his workers raises certain problems. "On the one hand, the employer often has to undertake these responsibilities without knowing the future scale or duration of his obligations; on the other hand, the worker may become irked by what may amount in fact to a 'tied cottage' system. A trend seems recognizable towards the setting up of certain fundamental rules concerning the responsibilities involved in estate housing, including (a) establishment of a common principle for determining the cases in which the employer should be required to house his workers; and (b) determination of the extent to which the employer should be

pp. 119-120.

<sup>&</sup>lt;sup>27</sup> For additional comments on housing conditions in Latin America, the Middle East, and South and Southeast Asia, see chapters X, XI, and XII. See also Low Cost Housing in South and Southeast Asia, United Nations document ST/SOA/3/ Rev.1, and Housing and Town and Country Planning, Bulletin No. 6, United Nations document ST/SOA/SER.C/60.

<sup>&</sup>lt;sup>28</sup> Such steps are already being taken, for example, in the British West Indies (cf. Housing in the West Indies, Bulletin No. 13, 1945, pp. 9-10); Report of the British West Indies Housing Conference, Barbados, 1951; and in Africa (cf. Tanganyika and Northern Rhodesia, United Nations document E/CN.5/207/Add.2, p. 33).

<sup>29</sup> ILO, Basic Problems of Plantation Labour, Geneva, 1950, pp. 119,120

required to provide buildings for various community requirements and activities."30

# Rural housing

Despite the rapid growth of the cities and the development of large estates where housing is provided by the employers, the great majority of the population in most of the less-developed countries are rural villagers, living in houses built by themselves according to traditional patterns and from materials locally available without cost, such as mud bricks (adobe), or bamboo with roof of thatch. The relative habitability of such dwellings varies widely from region to region and from family to family. Many of them are one-room hovels where "ventilation and light are inadequate; floors are dirty or muddy, roofs are low, dirty and inflammable. Facilities for preserving and preparing food are usually painfully inadequate; cooking is a dark, smoky operation; and fuel for cooking may be difficult to get or it is wasteful of valuable resources ... Arrangements for washing persons and utensils are at best difficult . . . The lack of sanitation is almost always dangerous . . . Tuberculosis, pneumonia, and cholera cannot be controlled . . . The water supply is inconvenient and frequently contaminated. Rodents and 

At its best, rural housing in underdeveloped areas is likely to evidence important shortcomings contributing to poor health—most commonly lack of sanitary latrines and of safe water supply.

In many villages throughout the world crowded and insanitary shelter has always been the norm, and in some cases conditions have deteriorated in modern times due to increasing population pressure, declining productivity of land, war devastation, and natural calamities.

Recently, governments and public bodies have come increasingly to consider the bad housing of the rural majority as a "problem" urgently demanding solution. In most cases, the resources of the governments are so limited and the demands on them so numerous that any extensive direct rural rehousing programme is reported to be out of the question. "Housing standards" which

would require such villagers to use more expensive materials or more complicated methods of construction would be completely unenforceable, given the prevailing low income levels and the lack of technical skills. In the long run, improvements in housing depend on improvements in productivity and general standards of living. In the short run, however, a great deal may be accomplished by schemes of "aided self-help" involving group action by the prospective householders stimulated and assisted by funds, materials, equipment and technical advice provided by public agencies. A number of countries and territories are working along these lines in connexion with community development, fundamental education, resettlement of refugees and settlement of newly-opened lands.<sup>32</sup>

# Conclusion

The General Assembly, at its recent session, considered that "lack of adequate housing constitutes one of the most serious deficiencies in the standard of living of large sections of the population of the world... and that serious social problems originate in, or are aggravated by, the shortage of housing". Governments are no longer satisfied with "expedient" measures; they are eagerly seeking permanent solutions to the housing problem. Meanwhile, accepted standards of adequacy in housing are gradually rising. In the long run better housing and community services can be obtained only within the framework of general economic and social advance.

In the more-industrialized countries, an important factor in achieving this goal is the increase of the efficiency of the building industry with a view to reducing housing costs. In fact, the provision of more and better housing may contribute significantly towards the fuller use of productive capacities in these countries. In the less-developed countries, the need for housing is frequently overshadowed by urgent needs for basic economic development. In these countries, it may often be necessary to concentrate upon better utilization of local materials, the resourcefulness of the people, and the advantages of group work, with continuing improvement of housing forming part of the improvement of living conditions in general.

No. 6, 1952.

33 General Assembly resolution 537(VI), adopted at the 371st plenary meeting, 2 February 1952.

<sup>30</sup> Survey of Problems of Low Cost Rural Housing in Tropical Areas: a preliminary report with special reference to the Caribbean area, United Nations document ST/SOA/2, 17 November 1950, pp. 19-20.

<sup>31</sup> Low Cost Housing in South and Southeast Asia, United Nations document ST/SOA/3/Rev.1, 16 July 1951, p. 11.

<sup>&</sup>lt;sup>32</sup> Information on these projects and their progress is still fragmentary. For a discussion of particular cases, see United Nations, *Housing and Town and Country Planning*, Bulletin No. 6, 1952.

# Chapter VI1

# **EDUCATION**

# Introduction

The Universal Declaration of Human Rights states that: "Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit." (Article 26, Part 1.)

The following chapter is concerned with the application of the above principles in the world today, the progress that is being made toward their fuller realization, and certain major problems that have arisen during this progress. An attempt is also made to indicate the extent to which the material means of communication—that is, means essential to the utilization of training received in school—are available to different peoples.

In concentrating on the more measurable aspects of education, the chapter necessarily omits certain less easily quantified factors, essential to a full assessment of the educational systems and problems of individual countries. Nor has an attempt been made to assess different philosophies of education, or the extent to which different school systems promote national welfare and international ideals. Moreover, this chapter is not concerned with educational laws, programmes and plans for the future, except in so far as they directly relate to the present availability of schooling.

On several important and relevant questions—the ratio of teachers to pupils, the number and location of schools, the availability of free text-books, meals and other services, the extent of adult education, etc.—it has not been possible to present data because available information is inadequate for a world-wide survey.

# NATIONAL LEVELS OF EDUCATION

General levels of education in the various countries of the world may be indicated by literacy rates and school enrolment rates.<sup>2</sup> The value of such a presentation is clearly limited by the incompleteness, imperfect comparability, and widely varying reliability of the data available; and by the inadequacy of such data to show

<sup>1</sup> Prepared by the United Nations Secretariat; checked and revised by UNESCO.

the actual usefulness of formal education in a given environment. At best, therefore, these statistics provide only rough and approximate indications of national levels of education.

# Literacy

"The measure of literacy—or illiteracy—seems the most obvious index of the efficacy of a country's educational system."3 The first column of appendix A gives available literacy rates derived from governmental sources (see pp. 86-98).

Data on literacy are commonly obtained through national censuses. Most countries take such censuses only at intervals of ten or more years, and may spend several years in tabulating and publishing the results. Available literacy rates are thus usually several years out of date. Furthermore, many countries and territories, particularly in regions where the level of literacy is probably lowest, have never taken a census.

Only about one-fourth of the world's population lives either in areas for which literacy data from 1940 or more recent censuses are available; or in areas (mostly in Northern and Western Europe and North America) where current literacy rates are confidently assumed to be above 95 per cent and where it has therefore been considered unnecessary to ask questions on literacy in recent censuses.4 For areas inhabited by another one-fourth of the world's population, there are only older figures from 1928-39 censuses, with a probability that the rates have changed in the subsequent years. Finally, for countries and territories with nearly one-half the world's population there are no census-based literacy data at all. In some areas without a recent census, literacy estimates have been based on surveys of limited groups, on school enrolment, on newspaper circulation, or even on such factors as the percentage of the population that has been baptized.5 The low reliability of such estimates is shown by the fact that different official sources in the same country may give quite contradictory figures—thus the literacy rate in one country has recently been estimated at 3

3 UNESCO, Literacy Statistics from Available Census Fig-

<sup>&</sup>lt;sup>2</sup> Data on literacy and school enrolment are from United Nations, Statistical Yearbook, 1948, 1949-1950 and 1951; from Non-Self-Governing Territories: Summaries and Analyses of Information transmitted to the Secretary-General; from annual reports of Trust Territories; from the *International Yearbook of Education*, 1948, 1949 and 1950; from reports submitted to of Education, 1948, 1949 and 1950; from reports submitted to the Fourteenth International Conference on Public Education; from UNESCO, World Handbook of Educational Organization and Statistics and Preliminary Report on Statistics on Primary Education (ST/R/5); from reports of United Nations and UNESCO missions and consultants; and from miscellaneous reports of governments available to the United Nations. Population data and estimates are from United Nations Demographic Yearbook, 1949-50 and 1951.

ures (Occasional Papers in Education no. 6), p. 7.

Finland, for example, which has had compulsory school attendance since 1921, stopped asking literacy questions after the 1930 census showed 99.1 per cent of the population to be

<sup>&</sup>lt;sup>5</sup> "In the Belgian Congo, the estimate of literacy is obtained by considering the great majority of Christians, who constitute one-third of the total population, as literate. The basis for the above criteria is set out as follows: '... Christian missions generally require from their catechumens a sufficient knowledge of reading. Since this measure has already been in force for several years, it may be considered that a great majority of the followers now registered by the Christian missions are no longer illiterate'." (United Nations, Non-Self-Governing Territories. Summaries and analyses of information transmitted to the Secretary-General during 1950, vol. III, p. 32.)

per cent, 10 per cent and 41.3 per cent by different official sources.

In general, "degree of difficulty in obtaining an index of illiteracy varies almost directly with the percentage of illiteracy".

There is also a problem of definition. "Literacy" may mean ability to read and write, or to read alone, or to write one's name, or school attendance for a given number of years. A category of "semi-literates" may or may not be distinguished. Literacy may be determined by a simple question asked by the census-taker, or it may be verified by some kind of test. It is, of course, practically out of the question for a census-taker to try to test "functional literacy", i.e., whether the individual has a firm enough grasp of reading and writing for them to be of any use to him. 8

In evaluating literacy data, it is further necessary to take into account the circumstances and opportunities of the individual who acquires literacy. In communities where there is little appropriate reading material and no stimulus to write, literacy in itself may have little significance. Experience shows that in such areas individuals who are taught to read and write frequently relapse into illiteracy—unless progress in literacy is accompanied by progress in other fields, particularly in the material means of communication. Information on the circulation of newspapers, letters, and other forms of written communication (see pp. 80-85 below) will indicate roughly the extent to which ability to read and write can be put to use in different areas.

In recent years, a number of countries have begun extensive fundamental education and mass literacy campaigns (see pp. 78-80 below). These campaigns have no doubt affected literacy rates, but the changes are not yet reflected in the statistical material at hand. The literacy rates given in appendix A thus relate chiefly to the progress of primary schooling, but by themselves they do not constitute an adequate index of the national level of education.

# School enrolment

Statistics on school enrolment, published annually on the basis of returns compiled by national or territorial

6 UNESCO, Literacy Statistics from Available Census Fig-

ures (Occasional Papers in Education no. 6), p. 10.

The Population Commission of the United Nations and the Inter-American Statistical Institute's Committee on the 1950 Census of the Americas have both recommended that "literacy should be defined for census purposes as the ability both to read and to write a simple message in any language". The recommendation of the latter body left it to "the desires of each country" whether literacy should be investigated "by direct questions or by reliable indirect means", and cautioned that "measures should be taken to avoid classifying as literate persons who can only write their names". United Nations, Population Census Methods (Population Studies no. 4, November 1949) p. 81

ber 1949), p. 81.

8 Even in countries with practically universal school attendance, a certain number of children manage to complete primary school without really learning to read. In the United Kingdom, a test of a sample group of 15-year-old children in 1948 revealed that 1.4 per cent were illiterate (with a reading ability less than that of an average 7-year-old) and 4.3 per cent semi-literate (with a "reading age" of between 7 and 9). Similar proportions of illiterates and semi-literates were found among adult Armed Forces recruits. (Educational Developments in 1950-51. United Kingdom report presented at Fourteenth International Conference on Public Education).

offices of education, are available for many more areas and are considerably more up-to-date than are literacy statistics.

The size of the school enrolment, however, does not necessarily tell how many children actually receive an education, since enrolment does not guarantee attendance. This is particularly true of less-developed areas where attendance is not enforced and where the school is a new institution that must compete with traditional demands of family labour. Reports indicate that in some instances, at least, attendance may be little better than half or two-thirds of enrolment. In these same areas, furthermore, both enrolment and attendance generally fall off sharply after the first year of school, so that many children who begin school do not attend long enough to become functionally literate (see below, pp. 62, 65). The educational situation in such areas may therefore be less favourable than the enrolment figures would indicate, in comparison with the situation in more educationally advanced countries where enrolment is high and attendance strictly enforced.

On the other hand, in many of the areas where school enrolment is low, religious orders and missions often conduct classes in which the rudiments of reading and writing are taught, although children so instructed may not be counted in official statistics of school enrolment. These imponderables may thus produce an actual level of education higher or lower than indicated by available enrolment figures.

Finally, in order to serve as an indicator of the level of education, size of school enrolment must obviously be considered in relation to population size. One approach is to relate school enrolment to estimates of total population for the corresponding year. Appendix A thus presents separately primary school enrolment and post-primary school enrolment as percentages of total population.

The ratio of school enrolment to total population indicates the amount of education a country is providing in relation to its size; however, it does not indicate what proportion of the children in the country are enrolled in school. For this purpose, it is necessary to consider school enrolment in relation specifically to the size of the school-age population. Children form a much larger part of the total population in some countries than in others, because of differences in birth rates and length of life (see chapter II).

The primary school-age population normally falls within the age-group of 5-14 years. That is, children normally begin primary school at 5 or 6 years or later,

<sup>&</sup>lt;sup>9</sup> In the Trust Territory of Ruanda-Urundi, for example, 105,038 students were enrolled in primary schools in 1950, while 343,773 students were enrolled in "chapel-schools". The latter schools take in Africans of "both sexes and all ages" and devote themselves chiefly to religious instruction, but they also teach reading and the elements of writing and arithmetic. Their enrolment is not included in official primary school statistics. In the Belgian Congo in 1948, 434,622 African children were in government and subsidized mission schools, 434,452 in unsubsidized mission schools which are probably similar to the "chapel-schools" of Ruanda-Urundi, but which are included in primary enrolment figures. In these and other African territories, the dividing line between schools included and those ignored seems to depend on local administrative practices. The same observation applies to Koranic schools in North Africa and the Middle East and Buddhist schools in Southeast Asia.

and end this phase of schooling at some period before they reach the age of 15. If we consider all countries for which data on age distribution are available for 1940 or later, the percentages of the population in the 5-14 year age-group range as follows:

Africa (non-European population) .... 20.8 - 27.1
Asia and Middle East (excluding Israel) 21.2 - 27.0
Latin America and Caribbean ...... 21.3 - 27.9
Southern and Southeastern Europe .... 17.9 - 22.1
Western and Central Europe, Canada,
United States, Australia, New Zealand 12.9 - 18.1

The regions composed of economically less-developed countries and territories have significantly higher percentages of school-age children than the regions of developed countries. The burden of providing an education for all children is thus heaviest in the areas economically least able to bear it (see p. 65 below).

Percentages of the population in the age-group 5-14 have been included in appendix A in order that account may be taken of the wide differences in age composition of populations in the evaluation of figures on school enrolment. Where the percentage of the population in the age-group 5-14 is not known on the basis of a census or official estimate for 1940 or later, a probable range has been indicated, based on older censuses and on recent data from similar areas.

The age-group 5-14 ordinarily embraces the age-group enrolled in primary schools but does not precisely coincide with it, being of wider range. In countries with well developed educational systems, children usually enrol in primary school at the age of 6 or 7 for a course lasting six or eight years, to be followed by secondary school. The age-group 5-14 covers a tenyear span. Therefore, where the primary school course is six years in length and all children attend for the full six years, the number of children enrolled in primary school should be equivalent to approximately 60 per cent of the 5-14 age-group. Where the course is eight years and compulsory, as in a majority of the developed countries, enrolment should be equivalent to about 80 per cent of the age-group.

Opinions differ as to the minimum period of primary schooling necessary to ensure permanent functional literacy. Estimates range from five years to eight years. In the great majority of countries, it is officially recog-

nized that the "complete" primary school course should take at least six years; this is true even of countries in which few children do in fact attend school for six years. Of the twenty Latin-American republics, for example, fifteen have six-year complete primary courses in urban schools and all but one of the remaining have primary courses of four or five years, with "intermediate" years bringing the required pre-secondary total up to six years or more.

The enrolment in primary schools of 60 per cent of the 5-14 year age-group, which indicates an average of six years' enrolment, may thus be used as a rough dividing line. Where enrolment reaches this figure or higher, and compulsory attendance is enforced, it can be assumed that nearly all children receive a fairly adequate primary education, according to present standards. Enrolments above 60 per cent of the age-group cannot safely be compared among themselves since secondary schooling may or may not begin after the sixth year, and since an appreciable number of students enrolling for more than six years may have passed the age of 14.

Primary school enrolments below 60 per cent of the 5-14 year age-group would indicate varying degrees of failure to provide all children with such an education. An enrolment of 50 per cent of the 5-14 year agegroup may be taken to signify an average enrolment of five years, 40 per cent an average enrolment of four years, 20 per cent an average enrolment of two years, etc. It should be emphasized, however, that an "average" enrolment of, say, two years does not mean that all children are educated for this number of years. On the contrary, it probably means that a few children receive six years or more of schooling, a larger number receive a shorter schooling, and the majority none at all. In general, inequalities in the distribution of primary education, which are concealed by use of an average figure for years of schooling, increase as one moves to the countries with lower levels of enrolment. In these same countries of low enrolment, a larger proportion of the children who do enrol are likely to drop out before completing the school year, so that an enrolment in primary schools of 20 per cent of the age-group may mean that only 15 per cent attend throughout the year and thus that the average length of actual schooling is only one and a half years.

Table I has been prepared in order to indicate roughly the level of education in the various countries and territories of the world in terms of the percentage of 5-14 year old children enrolled in primary schools or their equivalents and the corresponding average number of years of such enrolment. In view of the several imponderables and the lack of exact comparability of the

<sup>10</sup> It is "in conformity with the general experience of other countries that even with trained teachers . . . the completion of at least a five years' course is the very minimum likely to ensure permanent literacy. Indeed, in the United States the completion of the eighth grade is regarded as the irreducible minimum to secure functional literacy defined as the ability to read a newspaper and write a simple letter. In a more recent study in the Philippines . . . the facts seem to show that the completion of Grade VI is necessary to ensure permanent functional literacy among Filipino children". (UNESCO, Report of the Mission to Thailand. Paris, 1950, p. 17.) In Pakistan, it was found that children "almost always" reverted to illiteracy if they received no more than four years of schooling. "After six years, prospects were more favourable, especially if the village had some contacts with the outside world. By far the most favourable period, however, was eight years. After polemics which had lasted two years, it had been decided to make schooling compulsory for eight years, but to reach it gradually and in stages, the first stage being five years of compulsory education." (UNESCO/IBE/213, p. 7, Statement by Pakistan representative at Fourteenth International Conference on Public Education.)

<sup>&</sup>lt;sup>11</sup> Where attendance is not enforced, and primary school lasts seven or eight years, the figure of 60 per cent may, of course, include both children who enrol for more than six years and children who enrol for less, making an average of about six years. There are a few such cases but countries without compulsory attendance in general have no more than a six-year primary course.

statistical data,12 however, only four classes are indicated:

I. Countries and territories in which 60 per cent or more of the 5-14 year old children are enrolled in

12 The use of the percentage of 5-14 year old children enrolled in primary school and the corresponding average years of primary schooling as an index of educational level is complicated not only by factors already mentioned, but also by the effects upon the index in question of: death rates among the school-age population; the repeating of grades by students; and the differences in definition of "primary school". In the latter connexion, it should be noted that some countries provide in "pre-primary", post-primary "intermediate", or even early "secondary" schooling, the same type of training that elsewhere is called "primary" schooling; wherever possible, this fact has been taken into account in table I which deals with primary schooling "or equivalent". In general, considerations of this nature make comparisons meaningful only between countries at widely varying levels of education.

primary schools and in which the "average child" therefore enrols for six or more years.

II. Countries and territories in which 40-59 per cent of the 5-14 year age-group are enrolled in primary school, and the average child enrols for approximately four to five years.

III. Countries and territories in which 20-39 per cent are enrolled, and the average child enrols for approximately two to three years.

IV. Countries and territories in which less than 20 per cent are enrolled and in which the average enrolment is for less than two years.

In preparing table I, in areas where official data on the size of the 5-14 year age-group are lacking, the median figure for the probable range indicated in appendix A has been used.

Table I

DISTRIBUTION OF COUNTRIES AND TERRITORIES BY ESTIMATED AVERAGE NUMBER OF YEARS OF ENROLMENT FOR PRIMARY SCHOOLING (AS INDICATED BY PERCENTAGE OF 5-14 YEAR AGE-GROUP ENROLLED)<sup>a</sup>

|   | Africa   | Asia   | Europe  | Latin<br>America  | Middle<br>East                     | North<br>Americab   | Oceania                                     |
|---|--|--|---|---|------------------------------------|---|---|
| Average enrolment for at least six years (60 per cent or more of 5-14 age-group enrolled) | Basutoland <sup>e d</sup><br>Réunion   | Japan<br>Philippines <sup>e</sup><br>Ryukyu Is.  | Austria Belgium Bulgaria Czechoslovakia Denmark Finland France Germany (Federal Republic) Greece Hungary Iceland Italy Luxembourg Malta Netherlands Norway Poland Sweden Switzerland United Kingdom | Argentina®  | Cyprus <sup>c</sup><br>Israel      | Canada United States Barbados° British Guiana° Jamaica° Martinique° Netherlands West Indies Surinam° Trinidad Windward Is.° | Australia<br>New Zealand<br>Fiji°<br>Hawaii |
| Average enrolment for four or five years (40-59 per cent enrolled)                        | Mauritius<br>Southern<br>Rhodesia<br>Union of<br>South<br>Africa   | Ceylon <sup>e</sup><br>Korea (Republic of)<br>Singapore<br>Thailand                                  | Spain<br>Yugoslavia   | Chile Costa Rica Cuba Dominican Republic Mexico Panama* Paraguay Peru Uruguay Venezuela | Lebanon                            | Puerto Rico   | Papua <sup>4</sup>                          |
| Average<br>enrolment<br>for two or<br>three years<br>(20-39<br>per cent<br>enrolled)      | Bechuanaland <sup>a</sup> Belgian Congo <sup>a</sup> Gold Coast Kenya Madagascar Northern Rhodesia <sup>a</sup> Nyasaland <sup>a</sup> South-West Africa <sup>a</sup> Swaziland <sup>a</sup> | British Borneo <sup>4</sup> China <sup>f</sup> Federation of Malaya <sup>g</sup> Hong Kong Indonesia | Portugal <sup>g</sup>   | Brazil <sup>\$</sup> Colombia Ecuador El Salvador Guatemala Honduras Nicaragua          | Egypt<br>Jordan<br>Syria<br>Turkey |   | New Guinea <sup>4</sup><br>(Aus. T.T.)      |

Table I (cont'd)

DISTRIBUTION OF COUNTRIES AND TERRITORIES BY ESTIMATED AVERAGE NUMBER OF YEARS OF ENROLMENT FOR PRIMARY SCHOOLING (AS INDICATED BY PERCENTAGE OF 5-14 YEAR AGE-GROUP ENROLLED)

|  | Africa  | Asia   | Europe  | Latin<br>America              | Middle<br>East  | North<br>America <sup>b</sup> | Oceania                   |
|--|---|--|---|-------------------------------|---|-------------------------------|---------------------------|
| Average enrolment for less than two years (less than 20 per cent enrolled) | Algeriah Angola British Somaliland Cameroons (Br. T.T.) Cameroons (Fr. T.T.)h Eritrea Ethiopia French Equatorial Africa French West Africa Gambia Liberia Libya Morocco (Fr.) Morocco (Sp.) Mozambique Nigeriah Portuguese Guinea Ruanda- Urundi Sierra Leone Somaliland (It. T.T.) Tanganyika Togoland (Br. T.T.) Togoland (Fr. T.T.) Tunisiah Uganda Zanzibar |  |   | Bolivia <sup>h</sup><br>Haiti | Aden Colony<br>and Pro-<br>tectorate<br>Afghanistan  Anglo-<br>Egyptian<br>Sudan Iran Iraqh Kuwait Saudi Arabia |                               | Netherlands<br>New Guinea |
| No post-<br>1940 data<br>available   |   | Bhutan<br>Korea<br>(North)<br>Mongolian<br>People's<br>Republic<br>Nepal | Albania<br>Germany<br>(Democrati<br>Republic)<br>Romania<br>Saar<br>Trieste | c                             | Muscat and<br>Oman<br>Yemen   | Guadeloupe                    |                           |

\* Table is limited to countries and territories with populations over 200,000. Union of Soviet Socialist Republics not included because of lack of comparability of available educational and demographic statistics.

<sup>b</sup> Including Caribbean territories.

<sup>e</sup> Countries and territories in which primary enrolment is somewhat above the 60 per cent level but in which various factors (primary course longer than six years, attendance markedly below enrolment, enrolment of over-age children whose schooling was postponed due to wartime difficulties, etc.) make it probable that the percentage does not mean that nearly all children reach the sixth year of primary school.

d Enrolment figures include schools (of missions and other

voluntary agencies) which, in many cases, differ from primary

schools elsewhere in length of school day and year, content of instruction, and age-groups admitted. Furthermore, the statistics upon which these figures are based are often not fully adequate. The comparability of enrolment figures for these areas with those for other areas having more than 20 per cent enrolment may, therefore, be open to question.

e Primary enrolment nearly 60 per cent of 5-14 year age-

group.

f Data for China are subject to very wide margins of error; see footnote d to appendix A on p. 90.

F Primary enrolment nearly 40 per cent of 5-14 year age-

group.

h Primary enrolment nearly 20 per cent of 5-14 year agegroup.

Table I indicates that school enrolments in all the countries usually considered "economically developed" amount to 60 per cent or more of the 5-14 year agegroup. In most of these countries compulsory school attendance actually extends over more than six years; in some, it has been carried up to the age of 15 or 16 and into the period of secondary schooling. It appears, therefore, that practically all children in these countries receive a minimum primary education. Though the quality of schooling offered a child may vary according to residence, sex, race, family financial or social position, there is no important class of children who do not attend school long enough to become literate.

Except for certain small dependent territories, particularly island territories in the Caribbean and in Oceania, very few of the less-developed areas approach the six-year level.<sup>13</sup> Yet in some of the less-developed areas, the ratio of school enrolment to total population is considerably higher than in the developed countries.

Moreover, in these areas, as mentioned above, most of the children who begin school drop out before they

have completed the primary course. Thus, in fourteen Latin-American countries for which information is available, the number of students in the highest year of the primary course ranges between 1.7 per cent and 18.1 per cent of the number in the first year. 14 In some countries, more than half the total primary enrolment is in the first grade. This educational wastage is due to a number of factors: retardation of pupils, low living standards, attitude of parents and also the fact that most rural schools in the less-developed areas are "incomplete", offering only four years of schooling or less. The table below indicates the percentages of primary students enrolled in different primary years in a few school systems for which data are available. The lowest grades are, of course, weighted to some extent by yearto-year increases in enrolment and by pupils who repeat a year's work instead of passing to a higher grade. The figures for Brazil contrast the situation in that country's largest city, in most of the secondary cities, and in the rest of the country, including rural areas. The Cuban figures also contrast urban and rural conditions.

Percentage of total primary school enrolment in each grade

|      |                     | Brazil (1945)     |                 | Cuba (1 | 949-50) |                       |                   |                    |                            |
|------|---------------------|-------------------|-----------------|---------|---------|-----------------------|-------------------|--------------------|----------------------------|
|      | Federal<br>district | State<br>capitals | Rest of country | Urban   | Rural   | El Salvador<br>(1948) | Iraq<br>(1944-45) | Syria<br>(1944-45) | United States<br>(1947-48) |
| I    | . 34.2              | 44.0              | 58.1            | 30.6    | 45.3    | 57.5                  | 32.0              | 43.5               | 17.0                       |
| II   | 22.5                | 23.4              | 21.3            | 20.7    | 24.8    | 18.8                  | 18.3              | 21.5               | 13.6                       |
| III  | 10.4                | 17.8              | 13.4            | 16.4    | 15.0    | 9.6                   | 14.9              | 16.3               | 13.1                       |
| IV   | . 14.5              | 12.6              | 6.6             | 12.7    | 9.2     | 6.7                   | 12.9              | 11.3               | 12.6                       |
| V    | . 9.4               | 2.2               | .6              | 9.2     | 4.2     | 4.3                   | 11.8              | 7.4                | 11.9                       |
| VI   |                     |                   |                 | 6.1     | 1.5     | 3.1                   | 10.1              |                    | 11.2                       |
| VII  |                     |                   |                 | 2.9     |         |                       |                   |                    | 11.0                       |
| VIII |                     |                   |                 | 1.4     |         |                       |                   |                    | 9.6                        |
|      |                     |                   |                 |         |         |                       |                   |                    |                            |
|      | 100.0               | 100.0             | 100.0           | 100.0   | 100.0   | 100.0                 | 100.0             | 100.0              | 100.0                      |
|      |                     |                   |                 |         |         |                       |                   |                    |                            |

## Financial problems of education

It is a noteworthy fact that difficulties in obtaining trained teachers at the salaries offered are reported at all levels of economic development, among both the most wealthy and the most poverty-stricken countries. A moment's consideration, however, will show that the financial problems of providing universal primary schooling are, in general, vastly greater for the economically less-developed areas.

Mention has been made above of the higher ratio of children in the populations of less-developed countries. A clearer picture may be obtained by considering specific examples of countries at different levels of economic development, and comparing the percentages of the population in the school-age group of 5-14 and in the adult age-group of 20-69.

13 It should also be noted that in the case of several of these small dependent territories, the primary school course is known to be seven or eight years in length, so that the six-year 60 per cent level which these territories approximate does not mean that all children attend for six years (see footnote to table I). Thus, Jamaica with an eight-year primary course, but with an average enrolment of approximately six years, probably has a somewhat smaller percentage of children completing six years of education than does Puerto Rico, which has a six-year primary course and a considerably larger secondary enrolment

ondary enrolment.

14 UNESCO, Raising the School Leaving Age (Studies on Compulsory Education I), Paris, 1951, p. 64.

|                          |                   | ge of total<br>ation in |
|--------------------------|-------------------|-------------------------|
|                          | Age-group<br>5-14 | Age-group<br>20-69      |
| Belgium (1949)           | . 12.9            | 65.0                    |
| France (1950)            | . 13.1            | 63.1                    |
| Sweden (1947)            | . 13.1            | 65.0                    |
| Czechoslovakia (1947)    | . 14.9            | 62.7                    |
| England and Wales (1948) | . 13.0            | 65.3                    |
| United States (1949)     | . 16.5            | 61.1                    |
| Australia (1947)         | . 15.1            | 61.8                    |
| Mexico (1940)            |                   | 47.0                    |
| Jamaica (1943)           | . 23.9            | 51.2                    |
| Venezuela (1945)         | . 25.6            | 46.6                    |
| India (1931)             | . 24.6            | 49.6                    |
| Malaya (1947)            | . 27.0            | 49.4                    |
| Egypt (1937)             | . 25.9            | 49.4                    |
| Angola (1940)            | . 25.2            | 49.6                    |

In the first set of countries, there are four or five adults aged 20-69 to support the schooling of each child aged 5-14. In the second, there are only two adults to support each such child. Even if the less-developed country could maintain a budget as large as that of a developed country with the same population, it would have to devote a much larger proportion of its expenditures to primary schooling in order to achieve the same level of education.

Another factor that calls for larger proportional expenditures on education in underdeveloped areas is the need for greater capital outlay for school buildings and materials — a need occasioned by the much more rapid

population growth at the school-age level in these countries, as well as by the necessity of establishing new physical facilities where they have previously not existed. The fact that the populations of these areas are predominantly rural, so that the children are scattered in farms or villages rather than concentrated in cities, also tends to make universal education more difficult and more expensive. Inefficiences in public administration of school funds add other costs.

Comparison of data for a few countries in which funds from governmental budgets (as opposed to religious and private funds) appear to cover most educational expenditures indicate that the less-developed countries providing such data do in fact devote higher proportions of their budget (15 - 25 per cent) to education than the more-developed countries (9-13 per cent), although they have been unable to reach the standard of universal primary schooling maintained by the latter. These few less-developed countries for which data are available, however, are countries which have made considerable progress in primary schooling (Ceylon, Ecuador, Guatemala, Philippines and Thailand), and the evidence does not indicate that the less-developed countries in general necessarily devote such high proportions of their budgets to education.

Per capita expenditures for education (educational budget divided by total population), however, are much smaller even in those less-developed countries that devote high proportions of their budgets to education, because the total budgets themselves are much smaller in relation to population than in more-developed countries. Per capita expenditures on education in a few countries of Western Europe appear to range between \$US9 and \$US21, while in the few less-developed countries providing information, per capita expenditures range between \$US1 and \$US4. The differential is, of course, still more marked for expenditure per child of primary school age.

At the same time, it should be noted that less-developed countries do not necessarily devote a larger share of their national income to education. When one examines the scanty and frequently ambiguous information on the percentage of national income devoted to education through public expenditures, it appears that the developed countries, as a rule, spend about 2 or 3 per cent of their national income for public support of education in general, while the less-developed countries have a wider range — some, like Colombia (1.5 per cent in 1948) and Peru (1.5 per cent in 1949), appear to spend less; others, like Ceylon (3.7 per cent in

15 Ceylon and the Philippines have unusually high levels of

1947-8) and the Philippines (3.1 per cent in 1949), appear to spend more. 15 Less-developed countries may spend considerably more of their budgets but not much more, or even less, of their national income on education because their budgets tend to be smaller in relation to their national income — less of the wealth produced annually being taxed for public purposes. 16

## Trends in levels of primary education

To indicate trends, appendix A includes, where available, in addition to the latest available percentage of the total population enrolled in primary schools, a percentage derived from primary school enrolment in a prewar year, or at least for a period not less than four years earlier than the most recent data given. In many cases, however, data for an earlier year are not available. In others, changes in school systems, in methods of reporting educational statistics, in composition of population, or in national boundaries, limit the comparability of the data. Conclusions regarding specific trends in levels of education can only be tentative. The general picture one forms is of considerable unevenness in educational progress during the last decade or so. A few countries have shown remarkable growth of their educational systems, others slow but steady progress, still others no change whatsoever, and some appear to be actually regressing. Unless recent trends are sharply changed, it appears that a large proportion of the world's children at the end of the present century will still not be receiving even a primary school education.

In most of the countries with high levels of primary education, including almost all of those in Northern and Western Europe, the ratio of primary school enrolment to total population has declined slightly since the 1930's. With few probable exceptions, this reflects not a decline in education but in the percentage of population in the younger age-groups. In several countries (e.g., Belgium, France, Switzerland) the absolute number of 5-14 year old children has actually decreased. Recent increases in birth rates have arrested this decline, and most of the countries concerned expect increases in school enrolment throughout the next decade. In the areas at lower educational levels, the available evidence does not indicate a significant decline in the percentage of children in the population. In some cases, because of recent reductions of infant mortality, there has been an actual increase, and, in general, the absolute number of school-age children is growing by leaps and bounds. In the Philippines, for example, while the percentage in the 5-14 age-group changed very little (from 26.8) to 26.2) between 1939 and 1947, the number of indi-

current educational budget. And this estimate does not take into account the cost of providing the new schools, of bringing existing school buildings up to better standards, and of training the many more teachers who would be necessary. It also ignores the fact of the rapidly growing school population." The report goes on to state that some fiscal experts "maintain that the task of considerably augmenting the budget so that additional moneys could be devoted to educational and other social services is not insuperable". "One fiscal change advocated by these would-be revenue reformers is that income tax, which is practically confined to government officials whose incomes are known and to a minority of the merchants, should be extended to other forms of income, and that provision should also be made for an inheritance tax." UNESCO, Compulsory Education in Iraq (Studies on Compulsory Education IV).

education for their level of economic development.

16 The report by the Philippines delegate to the Thirteenth International Conference on Public Education states: "If one considers the national wealth and the national income of the people, the increase in government expenditure for public education should cause no alarm. Of the 4 billion pesos, considered to be the present level of the yearly earning power of the people, only about 7 per cent is taken by the government in the form of taxes." A UNESCO report on compulsory education in Iraq states: "It is estimated that, at the present time, the cost of providing primary education is \$8 [\$22.40] per pupil per year. Thus the cost of providing compulsory primary education for the 750,000 children of primary school age, even at the existing level, would amount to considerably more than \$6,000,000 per annum, i.e., probably twice as much as the total

viduals in the group increased by 720,000, or 17 per cent. In the British West Indies the number of children 6 to 15 is estimated to have increased from 509,000 in 1941 to 644,000 in 1951, and is expected to reach 779,000 in 1961.

Thus, on the one hand, countries with already wellestablished schools and teaching staffs have faced a relatively mild demographic problem during the last decade; while costs have risen, standards of primary schooling have been generally maintained and many of these countries have raised the school-leaving age and extended compulsory provisions into secondary education. On the other hand, some of the economically underdeveloped countries and territories have found it difficult to maintain standards achieved a decade or so ago, in the face of the rapidly expanding school-age population (as well as other problems of a political and economic nature). This is particularly true of those areas, as in parts of the Caribbean, where fairly extensive primary school systems have already been introduced, and where health programmes have cut mortality rates, especially among children, requiring rapid growth of schools merely to keep up the levels achieved.

In British Guiana, for example, "shortage of accommodation is rapidly increasing . . . The situation is already out of hand and . . . the rate of new building cannot meet more than a fraction of accommodation needs. Extraordinary measures will be needed . . . "<sup>17</sup> In Cuba, "a smaller proportion of the school-age children are enrolled today than a quarter of a century ago; the number of hours of instruction has been cut (from 5½ to 4 or as little as 2); the quality and morale of the teaching and supervisory force have gone down". Among the many expedients used by various countries and territories to stretch their educational resources are shortening of the years, days or hours of education, "double-shift" systems, and establishment of new schools on an emergency basis with curtailed courses.

Where, as among most African non-self-governing territories, school systems for the indigenous populations hardly existed a decade or two ago, initial progress has been rapid. Post-1945 data show appreciable year-to-year enrolment increases. Many of the territories have five-year or ten-year plans calling for continued increases in primary school capacity. As yet, however, these plans usually do not go so far as to envisage the enrolment of all children of school-age. In French West Africa, for example, "school enrolment is to be trebled in five years; by the end of the ten-year plan, 2 million pupils, or at least half the children of school age, should be receiving complete primary education". In Tanganyika, it is hoped to have 36 per cent of the "four-year village school age-group" in school by 1956. The school

capacity proposed in the original ten-year plan (approved in 1946) has already been revised upward due to the discovery that the population is increasing more rapidly than was expected. In the Gold Coast, "for financial reasons and because of the present shortage of teachers, it . . . may not be possible to provide the basic six-year course of primary education for all children of school-going age in less than 20-25 years from now".20

As these territories now at very low educational levels develop their primary education during the next decade or so, it may be expected that their health programmes will also develop in effectiveness, and they will be faced with the problem of a rapidly expanding child population.

Prospects for future educational development must also be viewed in the light of national incomes. In areas in which cash incomes are now very low, local taxation cannot bear the expense of adequate schools; the possibility of achieving universal primary schooling in the future will depend upon increase of local productivity, international assistance, expenditures on territories by the metropolitan governments, and the development of methods of education less expensive than conventional schools.

#### POST-PRIMARY EDUCATION

The percentage in the last column of appendix A indicates, subject to ambiguities in the available statistics, the reported enrolment in educational institutions above the primary level. This includes secondary, technical and higher institutions but not part-time adult and fundamental education and literacy classes. Systems and definitions of post-primary education vary so widely, however, that the figures in this column must be viewed with considerable reservation.

It will be seen that, by and large, where primary school enrolment is low, post-primary enrolment is low, and where the former is high, the latter is high. There is, however, an important qualification to this statement. Examination of appendix A will show that dependent territories, which generally lack a native educational tradition, differ significantly from independent countries in the fact that their educational resources are concentrated relatively more upon the primary grades. Thus, in the dependent territories, among the indigenous populations there are, in the majority of cases, from fifteen up to two hundred or more times as many students in primary schools as in all other schools combined (among the exceptions are Puerto Rico, Hawaii, Cyprus, Tunisia, Singapore and Hong Kong). In a fair number of dependent territories—in fourteen of the territories with a population over 200,000—there are more than fifty primary students for every postprimary student; in no independent country for which data are available, including independent countries of a less-developed economy, are there more than thirty primary students for every post-primary student. (This situation is, no doubt, affected by the fact that many of the dependent territories, particularly in Africa and Oceania, have lacked important urban centres, and have had no indigenous tradition of formal education, while

<sup>&</sup>lt;sup>17</sup> United Nations, Non-Self-Governing Territories, Summaries and analyses of information transmitted to the Secretary-General during 1950, vol. III, p. 52

General during 1950, vol. III, p. 52.

18 International Bank for Reconstruction and Development, Report on Cuba, p. 404. In Cuba, educational progress was hindered during the 1930's by economic depression and political and social disturbances, but during the more prosperous 1940's, "much of the educational investment which the Cuban people were willing and able to make was wasted . . . [as a] result of unstable administration, poor planning, political patronage and maladministration of funds" Op. cit., p. 405.

of unstable administration, poor planning, political patronage and maladministration of funds" Op. cit., p. 405.

19 United Nations, Non-Self-Governing Territories, Summaries and analyses of information transmitted to the Secretary-General during 1949, vol. II, p. 86.

<sup>&</sup>lt;sup>20</sup> United Nations, Non-Self-Governing Territories, Summaries and analyses of information transmitted to the Secretary-General during 1950, vol. III, p. 53.

in most independent countries of a less-developed economy, like the Latin-American countries, urban centres of culture have existed for centuries. The first step, in territories without a tradition of formal schooling, has generally been the establishment of primary schools; furthermore, in such territories there are often mission schools whose pupils may be included in the statistics on primary enrolment. See footnote 9, page 61).

In the majority of the independent countries of a less-developed economy, primary school enrolment is five to fifteen times as great as post-primary enrolment (among the major exceptions here are Afghanistan, Saudi Arabia, Indonesia, Thailand, El Salvador and Ethiopia, which have ratios between 20 to 1 and 30 to 1); and it is generally only between two and five times as great in the more-developed independent countries. Differences in school systems and in age-structure of population between less-developed and more-developed areas must, of course, be borne in mind. While specific figures and comparisons are open to question, and there are various exceptions, the general tendencies appear quite clear.

The extent of post-primary education thus appears to be closely related to social structure. In those dependent territories that have little post-primary education, although perhaps a fair amount of primary education, native leadership in government, large-scale agricultural enterprise and large-scale commerce is nonexistent or nearly so, and there is only a very small and incipient "middle class" of commercial, professional or technical personnel. In the less-developed independent countries, government, large-scale agricultural enterprise and large-scale commerce rest in the hands of indigenous minorities, frequently well-educated-often in a long tradition—and able to pay for post-primary education of their children (although the vast majority of the rural population may have little or no postprimary education, or even primary education). Thus, post-primary enrolment in such independent countries is commonly higher than in dependent territories, although primary enrolment is often considerably lower. In the more economically developed independent countries (whatever their political form), where the relative and absolute amount of post-primary education is much greater, there is a much larger body of specialized commercial, professional and technical personnel.

The need for a larger degree of post-primary educa-tion in territories being prepared for self-government is now generally recognized,21 and important changes are taking place (see page 69 below).

#### Secondary education

In many parts of the world, systems and purposes of secondary education are now in a process of transition. Traditionally, secondary education served chiefly as a preparation for university studies, and was confined to a minority expecting to go on to a university, or at

least economically capable of doing so. This is still the situation in a number of countries.22 But there has also developed, particularly in areas with extensive primary schooling, the principle that secondary education should be a normal continuation of primary education, open to all and even compulsory up to the age of 15, 16 or later. Most secondary education systems of any size today represent some mixture of earlier and later ideals.

Secondary schooling in Europe, in particular, presents examples of many stages of development, combinations of systems, reforms and experiments, with the picture changing from year to year. In the United Kingdom, for example, three main types of secondary schooling have been provided under a recently-established system: academic, for children expected to go on to higher education; technical, with opportunities to go on to advanced technical institutions; and "modern", the last providing a general continuation of primary schooling. In some districts, the three types of secondary school exist separately; elsewhere, "multilateral schools" combine them. "It is certain that there will be much experiment and unlikely that any single pattern of organisation will hold the field universally."23 In Denmark, children at 11 years enter one of two branches of a multilateral intermediate school, chiefly on the basis of written tests. One branch offers a four-year course and prepares for higher education, the other a three-year course. Under parental pressure, the proportion of children entered in the first branch has steadily increased from 10-20 per cent to nearly 50 per cent, and the question of whether the distinction should be abolished is now under discussion.24

A basic problem underlying many of the contemporary experiments in secondary education is the question of the extent to which secondary schools should prepare for specific vocations—and the question of which vocations should be considered. Secondary education has been confined in the past (and still is in many areas today) to cultural or "classical" subjects, and graduation from such a school has led to "white-collar" work. But it is obvious that as secondary schooling becomes universal, it cannot serve solely as a preparation for white-collar jobs, since "the great majority of jobs, even in the most technologically advanced countries, are still of a manual character . . .".25

Thus, while the prestige and traditional employment consequent upon a general cultural education in secondary schools have resulted in a mounting popular pressure for such "white-collar" schooling, educators themselves have endeavoured to adapt the secondary

<sup>&</sup>lt;sup>21</sup> The United Nations Commissioner for Libya reported to the General Assembly in 1950 that, of the problems he discovered in his initial tour of the territory, "the most pressing seemed to be the training of personnel for administrative posts, ranging from the clerical to the executive level . . .". (Annual Report of the United Nations Commissioner for Libya, 1950, p. 28). There was almost a complete lack of indigenous personnel sufficiently educated to administer the government, courts, etc.

<sup>&</sup>lt;sup>22</sup> In Colombia, for example, "the full secondary course is completed by few except those who plan to go on to university studies, for the number enrolled in first-year university courses is approximately equal to the number graduated from secondary schools. The total number of students who graduate from secondary schools each year [3,046 in 1948] is strikingly small for a country of 11 million population, especially when it is considered that the secondary schools should be a primary source for the great numbers of technicians, clerks and supervisors needed in Colombia's developing economy". International Pank for Reconstruction and Development, The Basis for a Development Program for Colombia, pp. 247-8.

23 International Yearbook of Education 1949, pp. 279-281.

24 International Yearbook of Education 1950, p. 78.

<sup>&</sup>lt;sup>25</sup> UNESCO, Expert Conference on Education and Technology, 26-30 June 1950, Summary Report (UNESCO/SS/TAIU/Conf.1/21).

schools to a more realistic appraisal of vocational possibilities—or else to divorce "cultural education" from its association with a particular kind of occupation and social class.

Where, of course, secondary schools hardly exist today, as in much of Africa, the graduates of secondary schools will continue to enjoy for some time occupational and psychological advantages. In these areas, prestige associations with secondary education may have a certain value in promoting popular acceptance of, and demand for, better education.

## Higher education

Since "higher" (post-secondary) educational institutions vary greatly in content, standards and years of schooling, and since, also, many students of the smaller and less-developed countries and territories go outside their borders for higher education and thus swell the educational statistics of other countries, it would be misleading to compare enrolments in higher institutions country by country. One can, however, indicate roughly the relative availability of higher education in the

major regions.

In Northern America (United States and Canada), about one person in seventy-five was enrolled in a higher educational institution in 1949-50. This enrolment includes junior colleges and higher technical schools, some of which might elsewhere be included under secondary education, and it covers a period in which enrolment still included a certain backlog from the war years and special educational benefits to veterans; in 1937-38, the proportion was about one in 115. In Europe, it is about one in 350; in Latin America, one in 725; and in the Middle East, one in 1,250. In Asia, the proportion appears to be about one in 1,100 or 1,200, but here the variations from country to country are too wide for the average to have much meaning. In Africa, the "European" populations of North Africa, of the Union of South Africa, and of some territories are probably at approximately the same proportion as Europe. Among the indigenous population (excluding Egypt and the Union of South Africa), enrolment in higher institutions, including institutions abroad, probably does not exceed one in 20,000.26

Until very recently most of the Non-Self-Governing Territories and several independent countries had no higher educational institutions of their own, except for an occasional divinity school. Since 1945, however, this situation has changed considerably. University colleges have been founded, or expanded, in the Anglo-Egyptian Sudan, Gold Coast, French West Africa, Madagascar, Nigeria and Uganda in Africa, as well as in Jamaica, Singapore and elsewhere. Most of the new institutions are expected to draw students from several adjoining territories. Thus far, of course, their enrolments are very small, but they can be expected to grow rapidly as the secondary schools provide more entrants and as economic development increases the demand for administrators and specialists. These institutions are usually modelled on the system of higher education prevailing in the administering country, with some emphasis on

techniques applying to the specific area. Difficulties have been noted in attracting students to subjects (such as agriculture and veterinary science) which are low in prestige or pay in relation to their value, although this may be due in part to the fact that the faculties have not yet been fully organized because of difficulties in recruiting staff, and accommodations not yet fully provided.

Because of the association of certain types of higher education with high-status occupations, one often encounters the paradox of an apparent over-supply of university graduates in less-developed areas. The higher institutions may produce more graduates in prestige professions, such as law and medicine, than can find paid employment. While technical subjects, such as engineering, and relatively new fields of study in economics, social sciences and physical sciences may be popular, they are usually taught with an emphasis on theory rather than practical application in the national economy. Many graduates exert pressure to obtain government jobs. Graduate professionals tend to congregate in the major cities, where cultural facilities, companionship of their own social class, and clients able to pay satisfactory fees can be found, so that part of a country may have a surplus, and other parts few or none. In some of the areas in which this imbalance has been most characteristic, in Eastern and Southern Europe, and in Latin America, the Middle East, and parts of Asia, various policies are being applied or advanced to correct it, by directing higher education into more immediately valuable fields of study, by recruiting students from outside the traditional urban élite, or by inducing or compelling graduates to serve, at least for a limited period of time following their graduation, in the localities where their services are most needed.

Thus the association of higher education with membership in a social or intellectual élite and its divorcement from physical labour and the labouring classes often appear to obstruct the best use of higher education for raising national standards of living. Technical advisory missions in underdeveloped areas have frequently complained both of the shortage of specialists in important technical fields, and of the over-theoretical training and outlook of those who are to be found. A familiar example is found in the case of higher technical experts in agriculture.<sup>27</sup>

## Technical and vocational education

As countries have developed complex industrial tech
27 See comments of experts from many countries in United States Department of Agriculture, Extension Service and Office of Foreign Agricultural Relations, Conference Report on Extension Experiences around the World, 16-20 May 1949. Washington, D.C. In Argentina, "higher education in which agricultural scientists and experts are trained is openly and avowedly theoretical, and these scientists are not accustomed to dealing face to face and easily with practical farmers. The inhibitions and blocks are cultural and psychological and rest upon the class structure, that is, the prestige and status of the educated man on the one side and the manual worker (farmer) on the other". In Japan, "the research workers, like nearly all other agricultural 'experts' and their teachers, grew up in the cities, had little or no farm experience, and are obsessed with the dignity and exclusiveness which they assume is inherent in their special calling. Even the Ministry of Agriculture . . . was manned chiefly by lawyers". In Turkey, "most of the agricultural school graduates have urban backgrounds and but slight understanding of rural problems".

<sup>&</sup>lt;sup>26</sup> In the African territories, enrolment abroad appears to be numerically more significant than enrolment in domestic institutions (about 4,000). The same thing is probably true of territories in the Caribbean and Oceania, but not of other major regions.

nologies, their needs for specialized skills have constantly changed and increased. Various systems of technical and vocational training in the regular schools, in separate schools, and in the industries themselves have been developed to meet these needs. The growth of such systems in the more-developed countries has been facilitated by the simultaneous growth of general education, which provides a basis for flexibility and specialization in new fields, and by the breaking down of barriers to occupational mobility (family, community, class or caste traditions of occupation).

In most of these countries, provision of technical education still depends largely on supply and demand, supplemented a varying extent by efforts on the part of governments and educators to estimate future needs for various skills, and to "guide" qualified students into training for occupations expected to expand. In the Netherlands, for example, a research department of the Ministry of Education, in co-operation with the Central Planning Bureau and the Central Bureau of Statistics, analyses "available data regarding the demand for labour, demographic development and change in the economic structure", as a basis for advice to the Ministry on "the direction in which the educational system should be stimulated, what types of schools should be enlarged and what new types of education should be encouraged".28 In general, however, current activities in this field are cautious, and it does not appear that much programming of technical education has yet been based on statistical estimates of long-term trends in occupational distribution.

Policy problems for technical and vocational education centre also on questions of co-ordination with general education, the age level at which specialized training should begin, and the maintenance of equal prestige for different types of training. The current trend appears to be to increase the minimum term of general education, so as not to commit the child prematurely to a specific occupation. There are also various attempts to eliminate extreme contrasts between technical and general schools by introducing cultural and social courses into the former; permitting graduates of technical schools at the secondary level to enter universities; conferring similar degrees and honours, etc.

On the other hand, there is also a trend towards providing for all children, during their last years of compulsory schooling, some pre-vocational preparation intended to develop an awareness of and a taste for manual work. In the field of apprenticeship, progress has been made by organizing supplementary courses and methodical programmes of training for apprentices, and by providing instruction in teaching methods for those who train them.

In the underdeveloped countries which are seeking to raise their economic level, the problem of technical training is particularly urgent and difficult. Shortages of skilled personnel necessary to carry out programmes of economic expansion are apparent. Yet experiences in training such personnel have shown that the problem is not simply one of creating technical schools or sending students abroad. A training programme based upon a hoped-for economic expansion may result chiefly in the creation of a group of specialists who cannot in fact

Very few of the less-developed countries have been able to draw up development plans and economic forecasts reliable enough to indicate how many and what kinds of skills and professions they will actually be able to use during the next ten years. A comment made by the International Labour Office in regard to Latin America probably applies to most of the less-developed countries and territories: they "admittedly do not possess the amount and kind of information needed accurately to assess training requirements and even to estimate the training needed to replace existing skills in the labour force." Under these conditions, it is understandable that a certain amount of wastage may occur in training programmes that look to the future rather than to immediate and manifest needs.

Already mentioned is the fact that most of the less-developed countries contain an élite that is highly educated, while the mass of the population is largely illiterate. Thus in such countries one often finds top-level personnel with advanced training in technical fields, who are competent to carry out basic research and to make surveys and plans, but not the middle-level personnel necessary to carry out operations and convert plans into actualities. For example, a country may have eminent medical professors but lack trained nurses; or it may have construction engineers able to design a dam but not the competent foremen and skilled construction workers to build it.

This lack of a base of skills at the operational level may be related to the "academic" or "theoretical" approach often reported to characterize projects in these areas; it may also be related to the tendency to avoid the kind of specialized training that brings one close to manual labour or (as in the case of teachers, country nurses, etc.) obliges one to live in the back areas of the country.

It should be added, however, that acquisition of new middle-level technical skills—as contrasted with the skills acquired through traditional systems of apprenticeship and father-to-son teaching—is made difficult by the lack of primary education, and, in many cases, by the substantial lack of technological features in the cultural environment (e.g., even in the toys with which children play).

In spite of these difficulties, improvements in technical training in many less-developed areas are being vigorously undertaken.

## DISTRIBUTION OF SCHOOLING: INEQUALITIES WITHIN COUNTRIES

The principle that schooling, at least at the primary level, should be available to all children on equal terms has been accepted by most countries in theory but has rarely, if ever, been fully attained in practice. Place of residence, sex, race, religion, language, occupation and income of parents may determine how much and what kind of schooling the child receives. In many cases, these factors operate cumulatively; in others, only one or two operate.

In countries in which separate schools are provided for boys and girls, for urban and rural children, or for members of different ethnic groups, inequalities are

find employment for their skills under existing economic conditions.

<sup>&</sup>lt;sup>28</sup> UNESCO/SS/TAIU/Conf.1/7, p. 1.

<sup>&</sup>lt;sup>29</sup> ILO, Training Problems in Latin America, 1950, p. 18.

measurable in terms of coverage, duration and quality of schooling offered, and of public financial support of the schools of the different groups. Real inequalities, however, are just as likely to exist where the school system is theoretically uniform and children are not systematically segregated.

The following discussion of distribution of schooling among different groups within countries can indicate only a few outstanding aspects of the question. The main emphasis is on inequalities in distribution of primary education. Such inequalities are usually carried on into secondary and higher education in much more extreme form. Furthermore, the student who has received a sub-standard or curtailed primary education is usually unable to qualify for admission to secondary school.

## Urban-rural distribution

There is probably no country in which rural children are not at some disadvantage in quality, duration or availability of schooling. In countries with highly developed school systems and good rural roads, the average disadvantage may be slight and the rural environment may offer compensations. The disadvantage increases sharply, however, in countries with poor communications, an impoverished peasantry, ethnic or cultural distinctions between the rural population and the population of the towns, and a political situation in which the rural population has little to say regarding the allocation of public funds.

Specific data on the percentages of urban and rural children enrolled in schools are available for very few countries. It is significant, however, that almost every country reporting a compulsory education system not yet universally enforced (appendix A, column II) indicates that the chief difficulties are in rural areas.

One indication of rural disadvantage in schooling is the fact that in a number of countries with "complete" urban primary schools offering six or more years of instruction, the rural schools offer only four years or less. Unless the rural child's parents can afford to send him to a town to continue his schooling, he must stop when he is barely able to read and write, and is therefore ineligible for secondary and higher education. In all except one of the twenty Latin-American countries, for example, the complete primary course in urban schools comprises at least six years, or else "intermediate" years are offered, bringing the total presecondary schooling up to six or more years; all except one demand at least six years' schooling as a prerequisite for secondary school. In ten of these countries, however, complete rural schools offer only from two to four years; in most of the others, while it appears that complete rural schools offer the same number of years as urban, few rural schools are "complete" in fact.<sup>30</sup> The situation is similar in most countries and territories of Africa, Asia and the Middle East, though in many cases it is not reflected in official specifications for

While countries with good roads and well-developed school systems may gradually equalize educational op-

<sup>30</sup> Inter-American Statistical Institute, Methodology in Statistics of Education, 1949.

portunity through the use of school buses and consolidated or centralized schools, offering high-quality education to rural children, elsewhere there are no funds for school buses and often no roads for them to use. The effective radius of the school is thus limited to the distance children can walk over bad roads or trails. Where the population is sparse, and only a handful of children can assemble in any one spot, difficulties multiply. The laws of many countries exempt children living more than two or three kilometres from the nearest school from compulsory education requirements; in some cases, such exemptions would cover the majority of rural children. The children of nomads create a special problem in several African and Middle Eastern countries and territories.

As a rule, the salaries of rural teachers are particularly low, the rural villages are frequently disease-ridden and lacking in modern amenities, and city-trained teachers consequently are unwilling to take rural posts. Even when there are special training institutes for rural teachers, the graduates are likely to seek and find more attractive positions elsewhere.<sup>31</sup> At least one country, Turkey, ensures that its rural normal schools produce rural teachers, by opening them only to the sons of peasants and by requiring the graduates to teach for twenty years in whatever village they are directed to by the Ministry of Education.

In the Anglo-Egyptian Sudan, students are trained as rural teachers in a model village, resembling the villages from which they have come and to which they will return to teach, but with some improvements in sanitation, agricultural methods, etc., which they will be expected to disseminate. In Bolivia and Peru, rural village schools are supposed to be complemented by "nuclear" schools covering several village schools, which teach the later primary years and also provide guidance for the village teachers.

Other areas frequently depend on some form of missionary zeal, whether religious, as in the African territories, or social, as in India or Mexico, to induce competent teachers to accept the conditions of rural life. Australia has sought to counteract the greater attraction of cities by use of a system that in effect pays rural teachers more than urban teachers.

In many rural areas, the average teacher has no training beyond the primary grades himself.<sup>32</sup> His school may be a hut or shed without desks or seats for the pupils and with only one or two copies of textbooks for a class; even pencils and paper may be lacking. While

<sup>31</sup> "Abstenteeism and apathy of teachers, especially in the rural schools, is a great evil, according to all accounts. Under the centralized system of appointment and assignment, it is difficult to get teachers to live in the communities they serve. They much prefer to live in the cities, especially in Habana." (International Bank for Reconstruction and Development, Report on Cuba, p. 428.)

32 In Colombia in 1946, for example, 47.6 per cent of 8,802 urban primary teachers and 81.6 per cent of 7,848 rural primary teachers were untrained. Cf. International Bank for Reconstruction and Development, The Basis of a Development Programme for Colombia, p. 249. "Because of the urgent need for more teachers, the rural normal schools give a shorter course than the regular normal schools (a three-year course instead of five), but most of the rural normal school graduates actually [take jobs in] . . . the urban schools if they go into teaching."

this type of teacher and school may be better than nothing, it cannot be expected to provide a very adequate education.

Considerable opposition on the part of rural parents to the schooling of their children is widely reported. Popular demands for better rural schooling are also reported; it is not possible with present evidence to judge the relative intensity of these two forces. The reluctance and apathy toward education stem from several conditions: needs for family labour in farming and herding; suspicion regarding new forms that threaten established ways of life; the obvious inadequacy of the schooling offered; lack of opportunity to use the skills acquired; and the irrelevance of much of the content of traditional education to the daily life of rural communities, so that schooling may appear to be a quite needless and impractical luxury. In general, despite economic and psychological difficulties, demand for better schooling appears to be growing in strength with modern improvements of communication and with demonstrations of the practical value of education.

Rural schools have been in the past, and commonly are today, essentially copies of urban schools, the teacher, as far as he is able, following exactly the same curriculum. The consequence often appears to be that the rural child forgets his book-learning as soon as he goes to work on the land, or that he attempts to use it by migrating to a town, leaving the educational level of his village no higher than before. The present trend, particularly in areas where rural education has lagged seriously behind urban, is to experiment with new types of rural school emphasizing gardening, handicrafts and other practical skills appropriate to the rural environment. The teacher may be expected to know enough about agriculture, hygiene, etc., to give useful advice and initiatives to the whole community. Elementary education may thus be combined with "fundamental education".33 By now, most of the underdeveloped countries and territories have taken at least the first steps in this direction. In many cases, however, elaborate plans for reforms in rural schooling have not been implemented because of lack of qualified teachers to carry them out and lack of continuity of policy in educational ministries that are frequently changing

There is also a basic question whether differing educational systems for rural and urban children may not consolidate class barriers. A practical education for the rural child may help him adapt himself to his environment; it may also tie him to that environment, deprive him of the opportunity of qualifying for secondary schooling, and thus ensure that all professions—other than that of rural teacher—are occupied by urban students. Educational experts are therefore not yet fully agreed upon the value of separate urban and rural school curricula.

## Distribution by ethnic group<sup>34</sup>

In a few countries and territories (the Union of South Africa, seventeen out of forty-eight states in the

33 See pp. 78-80.
34 More detailed information and recommendations relating to distribution of education in the Non-Self-Governing Territories may be found in United Nations, Non-Self-Governing Territories, Summaries and analyses of information trans-

United States, various Non-Self-Governing Territories in Africa), different ethnic or racial groups are directed by law to separate schools; mixed schooling is permitted only at the university level, if at all. In other areas in which ethnic or religious divisions are sharply defined (French North Africa, Cyprus, Malaya, Singapore, Ceylon, Lebanon) the great majority of parents choose to send their children to schools teaching their own language or religion, though mixed nonvernacular schools may be open to members of any group applying or able to pass an examination. In still other areas (such as the predominantly Indian countries of Latin America), a standard national school system is theoretically open to all children, but, in fact, is beyond the reach of the children of ethnic groups that live in remote rural areas, practise subsistence farming and are ignorant of the official language.

In states of the United States that maintain segregated schools, compulsory education laws apply both to whites and negroes, but racial differentials are reported to exist in "the training and salaries of teachers, physical facilities, length of school term, and in school attendance". "Much progress is being made toward wiping out" these differentials, and toward increasing negro high school and college enrolment. The Union of South Africa and in the majority of the African territories that have segregated schools, attendance is compulsory for European children only.

Many African territories have European-type schools, with European standards, that are designed chiefly or solely for the children of the European population. Separate schools may also be maintained for Indians or other non-indigenous minorities. Schools for the indigenous population are of several types, with varying standards: government schools, subsidized mission schools, unsubsidized but recognized mission schools, as well as unrecognized village schools meeting no official standards.

In general, considerably more government money is spent for the education of the European child than of the African child, although government expenditures for indigenous schooling are supplemented to a large extent by mission funds, and sometimes by funds of local African authorities.<sup>36</sup>

In French territories, admission to the "European" school system is determined by cultural status and educational qualifications rather than strictly by ethnic origin. In Madagascar in 1948, for example, 3,151 Europeans and 1,328 Malagasies were enrolled in "European" primary schools, while in "European"

mitted to the Secretary-General during 1950, vol. III, Special Study on Education (ST/TRI/SER.A./5/Add.2, January 1951)

1951).

35 Educational Developments in the United States. Summary Report of the Office of Education, Federal Security Agency, to Fourteenth International Conference on Public Education,

Geneva, 12-21 July 1951.

<sup>36</sup> In a few territories in which mission and other private expenditures can be discounted as of secondary importance, government expenditure per European child enrolled is from twice to thirty times as great as expenditure per African child actually enrolled. Considering all children of school age, however, whether enrolled or not, the expenditure per European child is probably rarely less than thirty and sometimes more than 100 times as great as the expenditure per African child. Expenditures on Asian children, where they have separate schools, are usually midway between the extremes.

secondary schools, Malagasies outnumbered Europeans, 745 to 709. The great majority of Malagasies, however (115,761) were enrolled in separate schools.

In Kenya, Northern Rhodesia and other United Kingdom territories of Central and East Africa, on the other hand, European-type schools are open only to Europeans, and more emphasis is placed on preservation and development of local culture in separate schools for Africans up to university level. In still other territories, such as the Belgian Congo, admission to European-type schools is legally open to children of all races, but in practice only European children and a few Eur-African children "whose general background is European" appear to attend.

Educational statistics for three African territories administered by different European countries may be given in detail to show the complexities of distribution among different ethnic groups:

|  | Population                     | Primary school enrolment                   | Secondary school<br>enrolment | Government expenditures<br>on education                    |
|--|--------------------------------|--|-------------------------------|--|
| Belgian Congo (1948)   |                                |  |                               |  |
| European   | 52,000<br>10,914,000           | 2,995ª<br>869,074 <sup>b</sup>             | 1,155°<br>12,422°             | BC.Frs. 83,237,000(1947)<br>127,000,000(1948) <sup>4</sup> |
| Kenya (1950)   |                                |  |                               |  |
| European<br>Asian <sup>e</sup>   | 38,000<br>120,000<br>5,475,000 | 3,841<br>22,176<br>338,653 <sup>r</sup>    | 1,947<br>3,484<br>11,687      | £333,583<br>246,433<br>418,939 <sup>g</sup>                |
| Morocco (Fr.) (pop. 1947, school enrolment 1949, educational budget for 1950) <sup>h</sup> |                                |  |                               |  |
| Non-Moroccans (Europeans)<br>Moroccans (Jewish)  | 325,000<br>204,000             | 45,180 <sup>1</sup><br>23,037 <sup>1</sup> | 10,3591                       | Frs.2,396,540,000°<br>252,000,000°                         |
| Moroccans (Moslem)   | 8,088,000                      | 99,706 <sup>k</sup>                        | 1,449 <sup>m</sup>            | 2,295,050,000°   |

a Official secular schools, official congregational schools, subsidized schools, non-subsidized schools, schools for recognized Mulattos.

In Morocco, segregation in the schools is based chiefly on language and religion; enrolment in the different types of school coincides largely but never completely with ethnic lines. Nevertheless, the real gap between the amounts of schooling received by the Moslem majority and the "European" minority in Morocco is as wide as in other African territories in which segregation is enforced.

In a number of other countries and territories in Asia, the Middle East and Oceania, there exist similar or more complex systems of voluntary segregation in schools along religious, racial, or linguistic lines.<sup>37</sup>

In some cases, there is no observable inequality in provision for the different groups. In others, the existing inequalities appear to depend primarily on the fact that one group is predominantly urban, another rural, or that one group is more eager than another to demand and take advantage of schools. In Malaya in 1947, for example, 10.3 per cent of the Chinese, 6.9 per cent of the Malays, and 6.7 per cent of the Indians were enrolled in schools. The advantage of the Chinese probably derives partly from their having a higher percentage of town dwellers than the other groups; in addition, the other two groups are probably more reluctant to send girls to school. In such cases, the declared policy of the government is usually to provide all groups with equal opportunities for schooling, and full knowledge of the composition, residence, economic status and cultural attitudes of each population group would be needed to explain apparent inequalities in educational level.38

b 3,876 in official schools, 430,746 in subsidized schools, 434,452

in non-subsidized schools.

e 785 in official schools, 4,844 in subsidized schools, 3,762 in non-subsidized secular schools, 3,031 in schools for clergy.

<sup>d</sup> Including BC.Frs.14,000,000 of extraordinary expenditure

for construction. In 1950, the educational budget for the indigenous population rose to BC.Frs.394,783,000, including BC.Frs.202,997,000 for construction.

Indians and Goans; Arabs (c. 25,000) are apparently combined with Africans in school enrolment statistics.

Numbers in different types of schools not available; in 1947, out of a total of some 2,200 African schools, "approximately 2,000 were mission schools. Of these about 600 were aided, either by the Government or by local Native councils".

F Plus £676,343 expended on educational buildings (presumably for all races), £220,078 expended by African Native Councils, £41,679 contributed by the Colonial Development and Welfare Fund, and unknown expenditures by missions.

<sup>37</sup> Hawaii, a territory inhabited by major immigrant and indigenous groups of seven different languages and national origins, no one of which is a majority, is the most conspicuous example among such territories of an alternative policy. A single school system for children of all ethnic groups, using English as the only language of instruction, has been applied as an influence toward unification.

<sup>&</sup>lt;sup>h</sup> Not including primary technical schools (8,422, including 4,789 Moslems and Jews), secondary technical schools (3,106, including 366 Moslems and Jews), private primary schools (9,852, including 2,585 Moslems and Jews), private technical schools (1,920, including 415 Moslems and Jews), nor traditional Moslem schools.

<sup>&</sup>quot;European education", including 7,872 foreigners, 1,530

Moslems, and 1,966 Jews.

"Jewish education" (Franco-Jewish schools and schools maintained by the Alliance Israelite), including 213 French

of Moslem status, 75 foreigners, and 82 Moslems.

\* "Moslem education", including 3,928 French citizens, mostly of Moslem status, 75 foreigners, and 958 Jews.

1 Including 665 foreigners, 729 Moslems, and 828 Jews.

m Including 55 French citizens and foreigners.

Not including Fre 503 000 000 for technical education and

Not including Frs.593,000,000 for technical education and Frs.407,689,000 for higher education.

o Most Jewish schools apparently maintained by the Alliance

P Not including expenditure on traditional Moslem schools (private), estimated at Frs.54,202,000.

<sup>38</sup> Segregation along these lines may not result in any significant inequalities among groups, but it necessarily makes the provision of schooling more expensive in the countries and territories which can least afford it. They must maintain duplicate schools, duplicate training systems for teachers, and must produce textbooks, etc. in several languages. Particularly in small towns and villages, this may seriously delay the provision of schools for all.

The same difficulty applies to the third type of segregation mentioned above, which follows lines of residence. An ethnic group which is predominantly rural and which lives at a subsistence level is always at a disadvantage in relation to one which is predominantly urban and actively engaged in the national economy: ethnic separateness may intensify the disadvantages of poverty and isolation. In such a case, a school system theoretically open to all on equal terms may in practice disregard the special needs of an underprivileged ethnic group which cannot take advantage of schooling conducted in a strange language and unrelated to local ways of life.

## Distribution by sex

Nearly all compulsory education laws apply equally to girls and boys. Where such laws do not exist or are not enforced, sex differentials in school enrolment appear to depend more upon the religious and cultural attitudes of the population than upon the general availability of schooling. Thus, in some areas at low levels of school enrolment, girls are more likely to attend than boys (e.g., Bechuanaland and some other African territories in which boys are required to herd cattle, while girls can be spared to attend schools); in others, as in French Somaliland, it may be generally taken for

granted that "girls . . . do not go to school because of the local customs" and they are excluded even from the official estimate of the school-age population.

In most countries, the number of females in the 5-14 year age-group is somewhat lower than that of males; consequently, if all children of both sexes go to school, enrolment of girls will be only 48 or 49 per cent of the total.

Table II illustrates the distribution of schooling according to sex in areas for which information is available. In most of the areas concerned total primary enrolment has risen considerably during the period since 1937 but enrolment of boys has often increased faster than that of girls.

In most (though not all) of the areas in which primary school enrolment of girls lags behind that of boys, secondary enrolment of girls lags to a much greater extent. Significant inequalities appear in a number of countries in which primary schooling for both sexes is practically universal. Percentages of girls in higher institutions are consistently lower than in secondary, and at this level female enrolment falls behind even in the countries in which the two sexes are on equal terms in secondary enrolment.

Table II

FEMALE SCHOOL ENROLMENT

Percentage of female students in primary, secondary and higher education

|                         | Primary<br>enrolment |                           | Secondary enrolment       | Higher<br>enrolment   |                        |       | mary<br>Iment             | Secondary enrolment       | Higher<br>enrolment       |
|-------------------------|----------------------|---------------------------|---------------------------|-----------------------|------------------------|-------|---------------------------|---------------------------|---------------------------|
| Country or<br>territory | 1937                 | Latest year<br>availablea | Latest year<br>availablea | Latest year available | Country or territory   | 1937  | Latest year<br>availablea | Latest year<br>availables | Latest year<br>available* |
| Africa                  |                      |                           |                           |                       | Swaziland              |       | 55                        |                           | _                         |
| Algeria                 |                      |                           | 41 <sup>b</sup>           | 33                    | Tanganyika<br>Togoland | •••   | 27                        | •••                       | _                         |
| Angola<br>Basutoland    | 45                   | 46<br>63                  | 45<br>36                  | 23                    | (Br. T.T.)             |       | 29                        | •••                       | _                         |
|                         | •••                  | 63                        |                           | 23                    | Togoland               | •••   | 27                        | •••                       |                           |
| Bechuanaland            | •••                  | 03                        | •••                       | _                     | (Fr. T.T.)             |       | 20                        | 18                        |                           |
| Belgian                 | _                    |                           |                           |                       | Tunisia                | 32    | 28                        | 32                        | 23                        |
| Congo                   | 5                    | 4                         | •••                       | •••                   | Uganda                 |       | 26                        |                           | 3                         |
| British                 |                      | F-4-                      |                           |                       | Zanzibar               | •••   | 20<br>27                  | i7                        | 3                         |
| Somaliland              | • • •                | 5*                        | _                         | _                     | Zanzinar               | • • • | 21                        | 1/                        |                           |
| Cameroons               |                      |                           | •                         |                       | 4 :                    |       |                           |                           |                           |
| (Fr. T.T.)              | •••                  | 15                        | 8                         | _                     | Asia                   |       |                           |                           |                           |
| French                  |                      |                           |                           |                       | British North          |       |                           |                           |                           |
| Equatorial              |                      |                           |                           |                       | Borneo                 |       | 29                        |                           |                           |
| Africa                  |                      | 15                        | 11                        | _                     |                        | 20    |                           | •••                       | 25                        |
| French West             |                      |                           |                           |                       | Burma                  | 30    | 39 (1947)                 | 4.44                      | 25                        |
| Africa                  |                      | 20                        |                           | 21                    | Cambodia               |       | 11*                       | 14*                       | ::-                       |
| Gold Coast              |                      | 25                        | 13                        | 7                     | Ceylon                 | 40    | 46                        | 38                        | 15                        |
| Kenya                   |                      | 26                        | ,                         |                       | China                  |       |                           |                           |                           |
| Madagascar              |                      | 40                        | 36                        | 17                    | (Formosa)              | • • • | 39                        | 32                        | 9                         |
| Mauritius               | •••                  | 41                        | •••                       |                       | Federation of          |       |                           |                           |                           |
| Morocco (Fr.)           |                      | 33                        | 40                        |                       | Malaya                 |       | 33                        |                           | _                         |
| Morocco (Sp.)           |                      | 43                        | 25                        | <u></u>               | French India           |       | 37                        | 26                        | 2                         |
| Mozambique              |                      | 36                        | 21                        |                       | Hong Kong.             |       | 40                        |                           |                           |
| Nigeria                 | 25 (1750)            | 21                        | 8                         | 4                     | India                  | 24    | 27                        | 13                        | 10                        |
| Northern                | •••                  |                           |                           | 7                     | Japan                  | 48    | 49                        | 46                        | 9                         |
| Rhodesia                |                      | 34                        |                           |                       | Macau                  |       | 40                        |                           |                           |
| Nyasaland               | •••                  | 3 <del>4</del><br>38      | •••                       | -                     | Philippines            |       | 47                        | 44ª                       | 43                        |
|                         | •••                  | 36                        | •••                       | _                     | Portuguese             | •••   | -17                       |                           | 70                        |
| Portuguese              | 27 (1020)            | 22                        |                           |                       | India                  |       | 42                        | 17                        | 14                        |
| Guinea                  | 27 (1938)            | 23                        |                           |                       |                        | • • • | 42                        | 1/                        | 14                        |
| Réunion                 | •••                  | 56                        | 32                        | 43                    | Portuguese             | 00    | 01                        |                           |                           |
| Ruanda-                 |                      |                           |                           |                       | Timor                  | 22    | 21                        | 7                         | _                         |
| Urundi                  | • • •                | 22                        | ::-                       | _                     | Sarawak                |       | 31                        | 40                        |                           |
| Sierra Leone            | • • •                | 27                        | 38 (1942)                 | )                     | Singapore              |       | 31                        |                           | 16*                       |
| Southern                |                      |                           |                           |                       | Thailand               | 45    | 48                        | 30                        | 8                         |
| Rhodesia                |                      | 45                        | 48°                       | · —                   | Vietnam                |       | 33*                       | 25*                       |                           |

Table II

FEMALE SCHOOL ENROLMENT (cont'd)

ercentage of female students in primary, second

| Percentage |        | le students<br>higher edu | in primary,<br>cation | secondary |
|------------|--------|---------------------------|-----------------------|-----------|
| Secondary  | Higher |                           |                       | Pri       |

|                         |            | nary<br>ment              | Secondary<br>enrolment             | Higher<br>enrolment       |                      | enro     | mary<br>Iment            | Secondary enrolment    | Higher<br>enrolment       |
|-------------------------|------------|---------------------------|------------------------------------|---------------------------|----------------------|----------|--------------------------|------------------------|---------------------------|
| Country or territory    | 1937       | Latest year<br>availablea | Latest year available <sup>2</sup> | Latest year<br>availablea | Country or territory | 1937     | Latest year<br>available | Latest year availablea | Latest year<br>availablea |
| Europe                  |            |                           |                                    |                           | Nicaragua            | 51       | 52                       |                        |                           |
| Austria                 | 50         | 50                        | 35                                 | 21                        | Panama               |          | 40                       | 51 (1946)              | ) <sup>b</sup> 46         |
| Belgium                 | 50         | 50                        | 28                                 | 16                        | Paraguay             | 45       | 46                       | • • •                  |                           |
| Bulgaria                | 46 (1936   | ) 47 (1947)               |                                    | 29 (1947)                 | Peru                 | 37       | 40                       | 37                     | 23                        |
| Czechoslovakia          |            | 50 (1947)                 |                                    |                           | Uruguay              | • • •    | 48                       |                        | 26*                       |
| Denmark                 | 49         | 49 ` ´                    | 51                                 | 20                        | Venezuela            |          | 50                       | 32                     | 18                        |
| Finland                 | 49         | 48                        | 58                                 | 37                        |                      |          |                          |                        |                           |
| France                  | 50         | 50                        | 50                                 | 35°                       | Middle East          |          |                          |                        |                           |
| Germany (Fed.           |            |                           |                                    |                           | Aden                 |          | 13                       |                        | _                         |
| Republic)               | 50         | 49                        |                                    | 17                        | Anglo-Egyp-          | •••      | 15                       | •••                    |                           |
| Iceland                 | 49         | 49                        |                                    | 49                        | tian Sudan           | 30       | 10                       |                        | 2                         |
| Ireland                 | 50         | 50                        | 50                                 | 28                        | Cyprus               |          | 46                       | 28                     | _                         |
| Italy                   | 48         | 47                        | 36 (1947)                          | 27                        | Egypt                | 36       | 35                       | 15                     | 7                         |
| Luxembourg.             | 49         | 49                        | 34                                 | <del></del>               | Iran                 | 28       | 25                       | 22                     | 3                         |
| Malta                   |            | 49                        | • • •                              | 6                         | Iraq                 | 26       | 25                       | 18                     | 16                        |
| Netherlands.            | <b>4</b> 9 | 49                        | 36                                 | 15                        | Israel               |          | 47                       | 54                     | 23                        |
| Norway                  | ::-        | 50*                       | 45 (1946)                          |                           | Jordan               |          | 21                       | 16 <sup>b</sup>        |                           |
| Poland                  | 47         | 48 (1946)                 |                                    | 37*                       | Lebanon              |          | 24 (1946)                | b 31 (1947)            | ) 15 (1937) t             |
| Portugal                | TO (1020)  | 45                        | 45                                 | 25                        | Saudi Arabia         |          | 0                        | 0                      | 0                         |
| Spain                   | 50 (1939)  |                           |                                    | 14 (1947)                 | Syria                | 33       | 28                       | 25                     | 19                        |
| Sweden<br>Switzerland . | 49         | 49<br>49                  | 52<br>45                           | 23<br>13                  | Turkey               | 34       | 38                       | 27                     | 19                        |
| United .                | 49         | 49                        | 45                                 | 13                        |                      |          |                          |                        |                           |
| Kingdom:                |            |                           |                                    |                           | Northern Ameri       | ca       |                          |                        |                           |
| England and             |            |                           |                                    |                           | (incl. Caribbean     |          |                          |                        |                           |
| Wales                   | 49         | 49                        | 49 )                               | (                         | Territories)         |          |                          |                        |                           |
| Scotland                | 49         | 49                        | 49*(                               | {23                       | Barbados             |          | 49                       | 36                     |                           |
| Northern                | 77         | 72                        | 77')                               | (                         | British              | •••      | 49                       | 30                     | _                         |
| Ireland                 | 49         | 49                        | 49*                                | 24                        | Guiana               |          | 48                       |                        |                           |
| Yugoslavia              | 43         | 46                        | 12                                 | 33                        | Canada               | 49       | 48                       | 52 (1947)              | 20                        |
|                         | 10         |                           | •••                                | 50                        | Guadeloupe           | 47       | 52                       |                        |                           |
| Latin America           |            |                           |                                    |                           | Jamaica              |          | 52                       | •••                    | 26                        |
| Argentina               | 48         | 48                        | 29 (1946)                          | 15 (1946)                 | Martinique           | •••      | 51 (1946)                | 52 (1946)              |                           |
| Bolivia                 |            | 37                        | 38 ` ´                             |                           | Puerto Rico.         | 47       | 47 (1947)                |                        | 50                        |
| Brazil                  | 49         | 49 (1946)                 |                                    | 17 (1947)                 | Surinam              | 46       | 46                       |                        | _                         |
| Chile                   | 49         | 48                        | 51                                 | 30                        | Trinidad             | •••      | 48                       |                        |                           |
| Colombia                | 42         | 49                        | 36 (1947)                          | 7                         | United States        | 49       | 49 (1947)                | 53 (1947)              | 32*                       |
| Costa Rica              | 49         | 49                        |                                    |                           | Windward             |          | • '                      | , ,                    |                           |
| Dominican               | <b>50</b>  |                           |                                    | 10                        | Islands              |          | 52*                      |                        | _                         |
| Republic                | 50         | 49                        | 46                                 | 18                        |                      |          |                          |                        |                           |
| Ecuador                 | 44 (1936)  |                           | 34                                 | 14                        | Oceania              |          |                          |                        |                           |
| El Salvador.            | 49 (1939)  |                           | •••                                |                           |                      | 40       | 40                       |                        | 10                        |
| Guatemala               | 42 (1946)  |                           | 10 (1047)                          | 17                        | Australia            | 49       | 48                       | • • •.                 | 19                        |
| Honduras                | •••        | 47<br>48                  | 10 (1947)                          |                           | Fiji Islands.        | 40 (1946 |                          | •••                    | •••                       |
| Mexico                  | •••        | 40                        | 38                                 | 18*                       | Hawaii               | 49       | 48 (1947)                | •••                    | •••                       |
|                         |            |                           |                                    |                           |                      |          |                          |                        |                           |

<sup>\* 1948, 1949</sup> or 1950 unless otherwise stated.

## Distribution according to income

Although statistical data are generally lacking, it is quite apparent, when different countries and different groups within countries are compared, that levels of education and income are closely interrelated. Higher income permits better education; better education leads to higher income. Low educational levels of rural populations, of certain ethnic groups, and even of women, are usually associated with low incomes (and with low economic and social status in general).

As compulsory primary schooling becomes effective in a country, poverty no longer prevents a minimum

education. In a few countries in which the school-leaving age has been raised to 15 or 16, the poor—with some exceptions—as well as the rich receive secondary education. Even in these countries, the quality of schooling available, or the social prestige conferred by it, may continue to depend partly on income. In many countries, private primary and secondary schools offer better, or at least more intensive, schooling to children whose parents can afford their fees. The public primary schools are often of poor quality because the more prosperous and influential part of the community sends its children to private schools and is not interested in improving the public schools.

\*Universities only (including University of Algiers).

d Including vocational.

f Foreign schools.

Public schools only.

e Primary and secondary schools.

In most countries today, access to higher education (and to secondary education when it is not universal) depends partly on the student's ability to pay fees and support himself without full-time employment, and partly on his intellectual aptitude (as shown in ability to pass examinations and qualify for scholarships).

In general, however, the importance of income is greatest in less-developed countries with small enrolments in secondary and higher institutions. In such countries, even if fees are not large and if financial assistance is available to qualified students, children of the great majority of the population—manual workers and peasants—are likely to be excluded both by inability to get an adequate preparatory education and by the need to start earning a living at an early age. The contributions that talented children of low-income parents might make to the future leadership and technical development of the country are largely lost.

In countries at higher educational levels, the trend is gradually toward equalizing the opportunities of qualified students to reach the top of the educational ladder, whatever their family's income or social status. In a number of cases (for example, Poland and other countries of Eastern Europe) governments have in recent years deliberately attempted to change the class composition of secondary and higher schools by seeking out qualified children of workers' and peasants' families and offering special advantages to them.<sup>39</sup> Elsewhere, the process has been less systematic, taking place through a gradual broadening of secondary and higher enrolment, with reduction or abolition of fees, and increases in scholarships and opportunities for students to support themselves by part-time employment.

In countries in which higher education has traditionally been supported largely by private philanthropic funds and students' fees—particularly the United Kingdom and the United States—there has been in recent years an increasing dependence of higher education upon public financial support. In the United States, more than half of the funds for higher education now come from public sources, and tax exemptions on the property and income of private institutions involve, in a sense, a public subsidy.

## Language of instruction<sup>40</sup>

One of the most difficult and complex problems confronting education and literacy movements is that of the language of instruction of the child or adult illiterate. Countries now enjoying universal literacy have settled this problem in one fashion or another. In most of them, in fact, it has never been a major source of difficulty. But as the ideal of universal education and universal literacy has spread into Non-Self-Governing Territories and into countries of recent nationhood, the problem of language of instruction has assumed in-

39 International Yearbook of Education, 1949; p. 244.
40 For further details and recommendations relating to the use of vernacular languages in education in Non-Self-Governing Territories, Summaries and analyses of information transmitted to the Secretary-General during 1950, vol. III, chapter II, Special Study on Education (ST/TRI/SER.A/5/Add.2, January 1951); The Use of Vernacular Languages in Education (A/AC.35/L.62, 17 September 1951); and The Problem of Vernacular Languages in Education (A/AC.35/L.103, 28 August 1952).

creasingly large proportions. Typical difficulties encountered are:

- (1) Absence of a written form of a spoken language, or, more commonly, absence of a sufficient amount of written material in the language so as to make literacy in it worthwhile, along with lack of an adequate vocabulary for expressing the content of modern education.
- (2) The existence of a multiplicity of vernaculars which are mutually unintelligible, mostly non-literary, and often limited to small districts.
- (3) Wide differences between the language of the government, the cities and the upper class, on the one hand, and the language or languages of the countryside, on the other hand.
- (4) Discrepancies between the written and the spoken form of the language, in particular, the existence of a highly complex form of writing ill-adapted to mass education.
- (5) The coexistence in the very same area, as a result of population movements and intermingling, of a number of literary languages, each spoken by a significant proportion of the people and each jealously guarded.

These problems, which are closely interrelated, demand policy decisions that may have incalculable repercussions upon the cultural and political life of the people concerned. Various ad hoc systems hastily adopted are now in process of trial, study and revision.

Africa (south of the Sahara) is a vast mosaic of vernacular languages, spoken by groups ranging in size from a few hundreds to several millions of persons. In the Belgian Congo alone more than 200 languages and dialects have been reported to exist.41 Most of the African languages have only recently been reduced to written form, if at all, and have little or no written literature. Furthermore, for purposes of education, for expression of technical ideas and transmission of knowledge developed in other cultures, their vocabularies are seriously limited. Language frontiers rarely coincide with territorial frontiers; a single language is often spoken by tribes scattered in several territories, but in only a few of the smaller territories do a majority of the indigenous population speak the same language. The situation is, however, changing. Certain African languages-particularly Swahili in Central and East Africa and Hausa in Nigeria—have spread over large areas as linguae francae, and are now being adopted as common written languages. Artificial attempts to create standard written languages for speakers of related dialects are meeting with some success. European languages are becoming more widely used. Arabic has penetrated some areas in the north along with Moslem culture and religion.

In some Non-Self-Governing Territories the policy has been to create a small literate minority, whose literacy should be in a language and of a nature that would

<sup>&</sup>lt;sup>41</sup> According to a report specially written for UNESCO in 1951 by Father Pierre Charles, S.J., of the Belgian Colonial Institute, "more than 500 dialects have been identified in the Belgian possessions in Africa alone; that research is continuing and the total figure will probably exceed 700".

enable the educated minority to work with the Administering Power in civil service or business affairs. Such limited vernacular schooling as existed was provided by religious missions. But with the modern view of education as a right of all children and a duty of the State, efforts have been started to extend education beyond this indigenous *élite*.

The question has arisen at once as to whether the schools of Africa should undertake to extend education to each child in his mother tongue, even if it is limited to a single village, or in a more widely used vernacular of his region, or in a European language.

It is easiest for a child to learn reading and writing in his mother tongue, but the African child—like other children of the world in similar situations—is apt to find little to read once he has learned, and must study another language in order to gain access to modern cultures and technologies.

On the other hand, teaching in an unfamiliar language encounters local resistance and imposes handicaps which are particularly unfortunate among a people to whom the very idea of education is new and strange. In a number of territories there is a compromise policy of starting education in the mother tongue while teaching another language, usually the language of the Administering Power, as a subject, and then, as a rule, shifting later to full instruction in the second language. The amount of handicap this particular policy entails is currently disputed by experts. It is the policy generally followed in the multilingual territories under Belgian, British and South African control: the Belgian Congo, Ruanda-Urundi, the Union of South Africa, and most of the United Kingdom territories of West, Central and East Africa. In the multilingual French territories of Equatorial and West Africa, on the other hand, the Administration considers that the large number of local vernaculars makes their use in the schools undesirable, and only French is taught.42 In most multilingual African territories, the unification of dialects and the spread of linguae francae are now being encouraged as a basis for future education.

In Asia, problems similar to those of Africa exist in the remoter regions of Afghanistan, Burma, China, India, Indonesia, Pakistan, the Philippines and Thailand, where concentrations of non-literary languages are to be found; in most cases, however, the tribes speaking non-literary vernaculars compose but small minorities of the national populations. In Afghanistan, India, Indonesia, Malaya and Pakistan, an equally, if not more serious, difficulty is the existence side by side, in the same cities and regions, of several languages

with highly developed literatures and separate cultural traditions. In China and Japan, the chief language difficulty facing education is the existence of complex systems of writing, remote from everyday speech, which employ several thousand characters at the level of ordinary newspaper style and impose a tremendous burden of memorization upon the learner. Various projects of simplification have been attempted or are presently under way.

In South and Southeast Asia, a number of multilingual countries which have recently gained independence and which previously used the language of the Administering Power in all schools, or in schools above the primary level, are now in the process of introducing newly-adopted national languages. In some cases, the national language is already spoken by a majority of the population (Ceylon, Burma) or is widely used as a lingua franca by peoples speaking local vernaculars (Indonesia). In India, Pakistan and the Philippines, however, the new national language is spoken only by one of several linguistic minorities and is unknown to the majority of the population. At present, in most of these countries now establishing a national language, education begins in the mother tongue of the students, and shifts later to the national language or English (or both). In the Philippines, however, only English and the national language are used in primary schools.43 Many of the policies now being applied are temporary; educational programmes forecast the gradual replacement of both local vernaculars and English by the national language.

The majority of the countries of Latin America are free from serious language problems. Local variations of Spanish and Portuguese do not differ enough from the official languages to make teaching in the latter unintelligible, and the Indian-speaking minorities are small. Important exceptions, however, are Guatemala and Mexico, where there is a complexity of indigenous vernaculars comparable to that of Africa; and Bolivia, Ecuador and Peru, where the majority of the rural population speaks either Quechua or Aymara. Indian languages were ignored by the schools in these countries until very recent years, but the desirability of using them in the first years of primary education has been increasingly recognized.<sup>44</sup>

One Latin-American country, Haiti, has a different type of language problem. Here the great majority of the population speak a vernacular (Creole) that combines French and West African influences. Not more than 15 per cent of the people are believed to be able to speak and write French, the official language. Until 1949, Creole was not used in Haitian schools and hardly existed in written form. Since then, on the recommendation of a UNESCO expert, a standard phonetic transcription has been adopted and teaching of Creole begun in some primary schools. "The use of Creole in Haiti has met with much opposition. The resistance is due mainly to the fact that Creole lacks any cultural prestige." Also "practically no literature has been published to satisfy the needs of those who have learned

<sup>&</sup>lt;sup>42</sup> In a report to UNESCO, the French Government states: "the establishment of a language is a difficult matter, calling for the assistance of linguists. Since the territories called Non-Self-Governing have as yet no native linguists capable of the work, France is to open in October 1951 a Centre des Language exotiques, attached to the School of Oriental Languages in Paris. The local University authorities are to discover and nominate any person who appears qualified, preferably as a teacher, to follow with profit the courses arranged by this Centre. It is hoped that specialists trained in this way in linguistic research and study and in phonetics will be able, when they return home, to work for the recognition and establishment of their native languages and thus make a practical contribution to the use of these languages in teaching." (United Nations document A/AC.35/L.62, p. 17.)

<sup>&</sup>lt;sup>43</sup> Nevertheless in a few experimental cases, the vernacular is used in the first two grades.

<sup>44</sup> Mexico, Costa Rica and Peru are already using the native vernaculars in the first steps of the Indians' education.

to read. If the horizons of the peasants were to be restricted to works so far printed in Creole they would be confined to an extremely narrow universe. The advocates of Creole are quite aware of this danger and they therefore regard the ability to read Creole not as the ultimate aim of literacy teaching, but as a first step toward enabling the peasants to make use of French".<sup>45</sup>

In the Arabic-speaking areas of the Middle East and North Africa, classical Arabic, closely associated with the Moslem religion, is the common language of instruction. There appears to be little demand for schooling in the Arabic vernaculars, although some vernaculars differ widely from classical Arabic. Classical Arabic plays an important educational role even in non-Arabic speaking Moslem areas, as among the Berbers of North Africa and Somalis of East Africa and in Afghanistan where it is taught along with Pushtu, the national language, and Persian. Iran uses the Arabic alphabet to write the national language (an Indo-European language) which contains many Arabic words and idioms, and makes the study of Arabic a compulsory subject in secondary school as well as in higher education. Turkey, however, has reacted against the influence of Arabic by changing to the Roman alphabet and endeavouring to eliminate Arabic words from the vocabulary.

In Oceania, one finds a smaller scale the same problems as in Africa. The three New Guinea territories and the British Solomon Islands Protectorate are particularly rich in local vernaculars. The two Australian-administered territories use the vernaculars in the first stages of primary education, changing to English later. In Netherlands New Guinea, Malay is being disseminated as a *lingua franca*. The Solomon Islands schools teach English only. Most of the other territories of Oceania have relatively small and homogeneous populations which have long been exposed to mission schools, so that elementary education using either the language of the administering country (American Samoa, Guam) or the vernacular (Fiji, Tonga, Western Samoa, etc.) has become general.

In the USSR, where about 200 languages are spoken, all nationalities use their mother tongue as the medium of instruction in their schools. The Russian language is compulsory, as the second language, in all non-Russian schools.

In addition to the language problems described above, various areas of the world include significant numbers of immigrants and descendants of recent immigrants clinging to their mother tongues. In the more economically developed countries, it is generally assumed that such immigrants are in process of assimilation and their mother tongues are used in the schools only to the extent necessary to help the children adjust to the national language. In less-developed areas, however, immigrant groups have frequently been quicker to demand schools than the indigenous population, and their

schools have used their own languages. Thus, in many African territories, one finds not only African schools and European-type schools but also Indian schools. In most countries of Southeast Asia there are separate schools teaching in Chinese. In Singapore and Malaya, where recent immigrants form the majority of the population, students have a choice of schools in four different languages, only one of which is indigenous. However, two areas with multilingual immigrant populations, Israel and Hawaii, attempt to unify the groups by teaching all children a single language which is native only to a minority.

As a general rule, language difficulties hampering education tend to be greatest in those areas where other serious obstacles to the development of school systems are found: predominance of a rural population at subsistence level, lack of communications, lack of well-trained teachers, a high ratio of children to total population, caste and class barriers, a low per capita income, etc.

## FUNDAMENTAL AND ADULT EDUCATION

A description of informal education outside regular schooling today cannot be based on specific evidence as full as that available for the school systems. The problem itself is vast: the number of persons who are illiterate amounts to one-half of the world's population. National efforts to deal with the problem perhaps represent one of the most significant trends in education at the present time.

Organized adult education began in the West as an attempt to make up for lack of schooling, and it took the familiar shape of the night school for adults and youths, with the aim of teaching literacy and simple vocational skills; the agencies involved were largely voluntary. This original view of adult education has been modified in most parts of the world. With the expansion of the school system two new approaches are evident: an attempt to prolong schooling (and thus to extend formal education for youth) and an acceptance by the State of some responsibility for informal education, either by means of direct action or by subsidies to voluntary agencies.

It is significant that countries with well-developed school systems also display great activity in the field of adult education. One of the largest single adult educational agencies in the world, for example, is the U.S. Department of Agriculture, with its vast programme of agricultural extension reaching out to farmers and farmers' wives throughout the United States. A similar expansion may be noted in Western Europe, where adult education has come to grips with the central problem of training for citizenship and for the use of leisure time. In the United Kingdom, comprehensive legislation has laid down that the public authorities have educational responsibilities for all members of the community regardless of their age.

It is, however, in situations where formal schooling is insufficient that adult education appears to have the most important role. Many States have attempted to deal with the problem of adult illiteracy by launching literacy campaigns. There is now a growing realization that mass illiteracy is associated, in a complex of cause and effect, with other social and economic deficiencies

<sup>45</sup> UNESCO, The Haiti Pilot Project, pp. 38-40. The prevalence of similar hybrid vernaculars is of some importance in education in a number of other territories: the Netherlands West Indies, Trinidad, Mauritius, Hawaii and the Australian Trust Territory of New Guinea. Except for New Guinea, they are not used in schools.

such as widespread disease, under-production, malnutrition, inadequate housing, and ineffective forms of social organization. A lasting solution can be found for these problems only as people acquire the essential knowledge and skills for raising their standards of living; hence the mere ability to read, write and calculate has little value unless it is combined with other knowledge effecting visible improvements in the way of life of the individual and the community—for example, knowledge of how to purify water, build latrines, improve homes, preserve foods, etc. In short, education lies at the foundation of economic and social progress. The major agency is the school, but the informal education of the community is an indispensable component of such a programme and may even surpass the importance of the school.

UNESCO has applied the term "Fundamental Education" to the various solutions of this nature which have arisen independently in different areas in response to similar needs: "'Fundamental Education' is that kind of minimum and general education which aims to help children and adults who do not have the advantages of formal education, to understand the problems of their immediate environment and their rights and duties as citizens and individuals, and to participate more effectively in the economic and social progress of their community . . . Fundamental Education is primarily concerned with those areas of the world (which are to be found to a greater or lesser extent in every continent and in most countries) where the vicious circle of illiteracy, disease and poverty limits the possibility of human progress-namely the economically under-developed areas."

This conception implies two principles: an all-round attack on social problems of whatever order they may be, and the integrated use of all educational agencies. As a modern tendency, it is to be found reflected in the programmes of UNESCO and of other international governmental agencies. However, the vast bulk of the informal education now in progress stems from national efforts, whether in the form of State-wide campaigns or of projects more limited in scope and space.

What is perhaps most striking in a survey of fundamental education campaigns, is their extent and variety. This variegated pattern of form and content may appear somewhat incongruous in view of the fact that human problems are basically similar in any given area: ignorance of the essential tools of living and ignorance of the skills required for handling these tools. But a closer examination of these campaigns reveals that this individuality can be traced to the need for paying regard to the social and economic background of the particular community and the beliefs and attitudes that have arisen from that background, if the community is to be helped to adjust intelligently to the contemporary world. Thus, in such projects as the Domasi Community Development Scheme in Nyasaland, which was started in 1949, and aims at helping the people of Malemia to adjust themselves to the impact of modern civilization on tribal life and society, the development of local leadership must inevitably be carried out by starting a tradition of local civic organization and government. On the other hand, among the cultural missions of Mexico, and in the fundamental education projects of rural India we have the development of local leadership and corporate civic effort through the revival and extension of the scope of such existing institutions as the *municipio* and the *panchayat*.

These fundamental education campaigns do not exclusively serve the rural and agricultural areas of the world. Many of them are located in urban areas, where technological and industrial development have drawn together huge communities of illiterate wageearners, presenting their own special problems of inadequate living. Thus, the Bombay City Education Committee, whose work dates back to 1939, carries out its programme among the underprivileged people of the city who work in the mills, factories and workshops and about 90 per cent of whom are illiterate. The main emphasis of the Committee was first on a literacy campaign; and in 1946 the Committee adopted a plan with the specific aim of educating 650,000 illiterates in ten years. The Committee conducts about 800 classes per session, each session lasting four months. The course consists of the teaching of the three R's and instruction in subjects such as health, hygiene, sanitation, history, geography, civics, science and general knowledge. The Jamaica Welfare Commission, which was first launched in 1938, deals with problems of a somewhat different character, through the same basic methods of fundamental education. The Commission's field of activity embraces, largely, a semi-rural plantation labour community and its literacy campaign is accordingly linked with the development of local crafts, better housing, improved agricultural techniques, development of co-operatives and the encouragement of local councils.

It is clear, therefore, that the particular and peculiar conditions of each region, arising from its social background and history, and the relative development of its economy, preclude the application of any standardized approach to the problems of fundamental education in underdeveloped areas. This diversity in methods and approach is paralleled by the variety of organizational forms developed for the conduct of fundamental education campaigns. On the one hand we have the purely voluntary type of organization illustrated by the Italian Unione Nazionale per la Lotta contra l'Analfabetismo, which was established in 1947 by a group of teachers, social scientists, intellectuals and government employees to help the rural people of Southern Italy and Sardinia to understand and solve some of their problems. On the other hand we have the pilot projects of Eddawar and Gorahpur in Uttar Pradesh, India, which are administered directly by the Government on the executive responsibility of the Development Commissioner. Between these two types of organization fall the semi-voluntary or State-aided enterprises common in India and South America, and the Development Authority constituted by statute, as exemplified by the Jamaica Welfare Commission.

This range of organizational forms poses special problems in the field of finance and of co-operation between specialized departments. A thorough and comprehensive programme of social and economic rehabilitation is inevitably costly, since it involves simultaneous

operations in many fields that are often administratively separate. As a general rule, governments are accepting more and more responsibility in this field, and the budgets voted for adult and fundamental education are no longer insignificant in comparison with those devoted to formal schooling. On the other hand, the project approach and the close relation of fundamental education to the better use of local resources provide a way out of the financial impasse. Any campaign for improvement of literacy, health, agriculture and social organization will have economic as well as social results; it is this cumulative effect of fundamental education, viewed as in investment, which justifies its inclusion in development plans. This is not to say, however, that a serious programme can be run without a substantial investment of capital and effort.

Since most of the schemes of fundamental education are of recent date, it is not possible to determine how effective they are or how they may be related, in terms of cost, operation and results, with the formal education system.

#### COMMUNICATION FACILITIES

Education depends upon communication facilities, not only as a means of teaching, but also as a means whereby the benefits of education can be enjoyed. Thus, in the most elementary sense, literacy is virtually useless without material to read. The spread of mass education has involved the increasing use of mass media of communication—books, newspapers and periodicals, radio and films—as well as the individual media of mail, telephone and telegraph. The presence of an educated populace has stimulated the development of these media, and the media have, in turn, stimulated education. Conversely, the absence of such media, the cultural isolation that still characterizes a vast number of communities of the world, has proved a serious obstacle to education. The present discussion will consider briefly the availability of two major mass media of communication—radios and newspapers—which are particularly important both for the furtherance and for the utilization of education, and for which some quantitative data are available.<sup>46</sup>

Tables III and IV indicate in schematic form the availability of radios and newspapers on a world-wide basis. A few countries in Northern and Western Europe, North America and Oceania, have one radio receiving set or more in use for every five persons (or for a typical family). The same countries, plus several others, have also one copy or more of a daily newspaper circulated for every five persons. In the United Kingdom, one newspaper is circulated to every 1.7 persons, and in the United States, there is one radio to somewhat less than two persons. These figures probably represent something close to a "saturation" point. In all countries which have reached the one-to-five level, and in some others which are close to it, it can be assumed that practically the entire adult population has access to modern means of communication. In the second and third groups shown in the tables, relatively large proportions of the population are barred by poverty or illiteracy or rural isolation, from the use of newspapers and radios. In the fourth and fifth groups, it can be assumed that use of daily newspapers and radios is confined for the most part to small urban and upper-income minorities; in the case of Non-Self-Governing Territories, to non-indigenous minorities.

Such tables, of course, can give only a very rough idea of the different levels of use of communication facilities. Statistics on radio receiving sets in use are frequently based on the number of sets licensed and may be only a fraction of the true number if the licensing system is not strictly enforced; where there is no licensing system, the figures may be little more than guesses. Even more important, in countries "saturated" with radios, one family may own several,

 $Table \ \ III$  distribution of countries and territories by number of inhabitants to each radio receiving set

|  | Africa | Asia                    | Europe   | Latin<br>America  | Middle<br>East | Northern<br>Americaª                                  | Oceania                  | USSR      |
|--|--------|-------------------------|--|---|----------------|---|--------------------------|-----------|
| At least<br>one to<br>every 5<br>persons |        |                         | Denmark <sup>b</sup> Iceland <sup>b</sup> Luxembourg <sup>b</sup> Norway Sweden <sup>b</sup> Switzerland <sup>b</sup> United Kingdom   |   |                | United States   | Australia<br>New Zealand |           |
| One to 6-20 persons                      |        | Japan (49)<br>Singapore | Austria <sup>b</sup> Belgium <sup>b</sup> Czechoslovakia Finland France Germany <sup>b</sup> Hungary <sup>b</sup> Ireland <sup>b</sup> Italy <sup>b</sup> Malta Netherlands <sup>b</sup> Trieste | Argentina (49)<br>Chile (49)<br>Cuba (49)<br>Panama<br>Paraguay (49)<br>Peru (49)<br>Uruguay (48) | Israel         | Canada<br>Netherlands<br>West Indies<br>Puerto Rico ( |                          | USSR (49) |

<sup>46</sup> For the most recent detailed information on communication facilities, see UNESCO, World Communications—Press, Radio, Film, Television (new and revised edition, July 1951).

Table III (cont'd) DISTRIBUTION OF COUNTRIES AND TERRITORIES BY NUMBER OF INHABITANTS TO EACH RADIO RECEIVING SET

|  | Africa  | Asia  | Europe  | Latin<br>America  | Middle<br>East   | Northern<br>Americaª  | Oceania  | USSR |
|--|---|---|---|---|--|---|--|------|
| One to<br>21-100<br>persons              | Algeria<br>Mauritius<br>Morocco (Fr.)<br>Réunion<br>Tunisia <sup>b</sup><br>Union of<br>South<br>Africa | Hong Kong (49)  | Albania (48) Bulgaria <sup>b</sup> (48) Greece (49) Poland <sup>b</sup> Portugal <sup>b</sup> Romania <sup>b</sup> (49) Spain <sup>b</sup> (48) Yugoslavia <sup>b</sup> | Bolivia (49) Brazil <sup>b</sup> (48) Colombia Costa Rica Dominican Republic Ecuador El Salvador Guatemala <sup>b</sup> (51 Honduras (49) Mexico Nicaragua Venezuela (48) | •  | Barbados (49)<br>British<br>Guiana (49)<br>Martinique<br>Surinam<br>Trinidad and<br>Tobago (49) |  |      |
| One to<br>101-500<br>persons             | Angola Eritrea (48) Gold Coast (49) Kenya Northern Rhodesia Southern Rhodesia (49) Swaziland            | British Borneo <sup>b</sup> Ceylon China Indonesia Macau Philippines (49 Thailand | )   |   | Aden Colony<br>(49) and<br>Protectorate<br>Egypt <sup>b</sup><br>Iraq <sup>b</sup> (49)<br>Jordan <sup>b</sup><br>Saudi Arabia | Guadeloupe<br>Jamaica (51)<br>Windward Is.  | Fiji   |      |
| Less than<br>one to 500<br>persons       | Belgian   | Burma <sup>b</sup> (49)<br>India <sup>b</sup><br>Pakistan                         |   |   | Afghanistan <sup>b</sup><br>Anglo-Egyptiai<br>Sudan (49)   | 1   |  |      |
| Number of radio receiving sets not known | (Fr. T.T.)  |   | Saar  |   | Yemen<br>Kuwait<br>Muscat<br>and Oman  |   | Hawaii<br>Netherlands<br>New Guinea<br>New Guinea<br>(Aust. T.T.)<br>Papua |      |

Source: Data supplied by Statistical Division, UNESCO, according to number of receiver licences or estimates in 1950, except for those countries indicated by (48), (49) or (51).

Including Caribbean territories.
 Based on number of licensed receivers only.

 $Table\ IV$  distribution of countries and territories by number of inhabitants to each daily newspaper circulated as of 1949-50

|   | Africa   | Asia   | Europe   | Latin<br>America  | Middle<br>East  | Northern<br>Americaª  | Oceania  | USSR |
|---|--|--|--|---|---|---|--|------|
| At least<br>one copy<br>to every<br>5 persons |  | Japan  | Austria Belgium Denmark Finland France Germany Iceland Ireland Luxembourg Netherlands Norway Sweden Switzerland United Kingdom | Argentina   | Israel  | Canada<br>United States   | Australia<br>New Zealand<br>Hawaii               |      |
| One copy<br>to 6-20<br>persons                | Union of<br>South<br>Africa  | Singapore  | Albania Bulgaria Czechoslovakia Greece Hungary Italy Malta Poland Portugal Romania Spain Trieste Yugoslavia                    | Chile<br>Colombia<br>Costa Rica<br>Cuba<br>Panama<br>Uruguay<br>Venezuela                               | Cyprus<br>Lebanon   | Barbados<br>Netherlands<br>West Indies<br>Puerto Rico<br>Trinidad<br>and Tobago |  |      |
| One copy<br>to 21-100<br>persons              | Algeria<br>Morocco (Fr.)<br>Southern<br>Rhodesia<br>Tunisia  | Ceylon<br>Federation<br>of Malaya<br>Philippines             |  | Bolivia Brazil Dominican Republic Ecuador El Salvador Guatemala Honduras Mexico Nicaragua Paraguay Peru | Egypt<br>Jordan<br>Syria<br>Turkey  | British Guiana<br>Guadeloupe<br>Jamaica<br>Surinam<br>Windward Is.              |  |      |
| One copy<br>to 101-500<br>persons             |  | Burma<br>China<br>India<br>Indonesia<br>Pakistan<br>Thailand |  | Haiti   | Iran<br>Iraq  |   |  |      |
| Less than<br>one copy<br>to 500<br>persons    | Basutoland <sup>b</sup> Bechuanaland <sup>b</sup> British Somaliland French West Africa Liberia <sup>b</sup> Northern Rhodesia <sup>b</sup> Nyasaland <sup>b</sup> Swaziland <sup>b</sup> Tanganyika Uganda <sup>b</sup> |  |  |   | Aden Colony<br>and Pro-<br>tectorate <sup>b</sup><br>Afghanistan<br>Saudi Arabia <sup>b</sup><br>Yemen <sup>b</sup> | Martinique <sup>b</sup>   | New Guinea<br>(Aust. T.T.)<br>Papua <sup>b</sup> |      |

Table IV (cont'd)

DISTRIBUTION OF COUNTRIES AND TERRITORIES BY NUMBER OF INHABITANTS TO EACH DAILY NEWSPAPER CIRCULATED AS OF 1949-50

|                     | Africa  | Asia  | Europe | Latin<br>America | Middle<br>East  | Northern<br>America <sup>a</sup> | Oceania                           | USSR |
|---------------------|---|---|--------|------------------|---|----------------------------------|-----------------------------------|------|
| No in-<br>formation | Angola Cameroons (Fr. T.T.) Cameroons (U.K. T.T.) Eritrea Ethiopia French Equatorial Africa Gambia Gold Coast Libya Madagascar Mauritius Morocco (Sp.) Mozambique Nigeria Portuguese Guinea Réunion Ruanda-Urunc South-West Africa Togoland (Fr. T.T.) Togoland (UK. T.T.) Somaliland (It. T.T.) Zanzibar | Korea<br>Macau<br>Mongolian P.R.<br>Portuguese<br>India<br>Portuguese<br>Timor<br>Nepal | Saar   |                  | Anglo-Egyptian<br>Sudan<br>Kuwait<br>Muscat and<br>Oman |                                  | Netherlands<br>New Guinea<br>Fiji | USSR |

Sources: UNESCO World Communications (new and revised edition, July 1951). United Nations Statistical Yearbook and UNESCO data submitted for United Nations Statistical Yearbook 1951.

each only occasionally in use. Where radios are scarce, one set may be the source of news and entertainment for all the people of a village. In countries "saturated" with newspapers, one man may buy several each day, read a few items in each, then throw them away. Elsewhere, one copy may be passed on to a dozen readers, posted in a public place, or read aloud to illiterate friends and relatives. Also, weekly newspapers circulate in many areas where the population cannot afford to buy dailies. In many of the African territories, for

example, the daily newspapers are in European lan-

guages and cater to European interests, while weekly

vernacular papers circulate widely among the Africans.

Newspaper circulations in most countries appear to have increased considerably during the past decade. Increases in production of newsprint have, however, been limited, and these increases have been more than absorbed by one country, the United States. Elsewhere than in the United States, growth in newspaper circulation has been made possible only by reduction of the average number of pages. The United States at present consumes more than 60 per cent of the world output of newsprint, and United States daily newspapers average about 36 pages (about 60 per cent of which are occupied by advertising matter). In other countries, daily papers rarely average more than eight pages; in many they have been reduced to six or four. In 1957, UNESCO's

sub-commission on the Press and news agencies stated that "to cover satisfactorily both national and international, as well as local news, in addition to providing a proportion of lighter matter and advertising, a newspaper needs to have at least eight standard-sized pages".

Per capita consumption of newsprint is given in table V for countries where such information is known. Newsprint is used for many periodicals other than newspapers, for various kinds of reading matter with mass circulation, and to some extent for text-books. Most countries are believed to consume two to three times as much newsprint as of all other types of printing paper. The shortage of newsprint after the war has thus affected the dissemination not only of news but also of educational materials. Even countries at high educational levels, such as France, have reported shortages of text-books. The under-developed countries, while expanding their school systems and commencing instruction in previously non-literary vernaculars, have found it difficult to produce classroom texts, to say nothing of follow-up material for the newly literate.

Of Indonesia, for example, it is stated: "There are not nearly enough books for those already in the schools and the shortage of paper and printing facilities preclude the solution of the problem for some considerable time . . . The price of text-books, in fact all books, is

<sup>&</sup>lt;sup>a</sup> Including Caribbean territories. <sup>b</sup> No daily newspaper published.

Table VDISTRIBUTION OF COUNTRIES AND TERRITORIES BY ANNUAL CONSUMPTION OF NEWSPRINT IN KILOGRAMMES PER CAPITA

| Kgs. per<br>capita | Africa                      | Asia   | Europe  | Latin<br>America   | Middle<br>East                                      | Northern<br>America <sup>a</sup>      | Oceania     |
|--------------------|-----------------------------|--|---|--|---|---------------------------------------|-------------|
| More<br>than 30    |                             |  |   |  |   | United States                         |             |
| 21 to 30           |                             |  |   |  |   | Canada                                | Australia   |
| 11 to 20           |                             |  | Denmark<br>Sweden<br>United Kingdom   |  |   |                                       | New Zealand |
| 6.1 to 10          |                             |  | Belgium Finland France Ireland Netherlands Norway Switzerland                     | Uruguay (49)   |   |                                       |             |
| 2.1 to 6.0         | Union of<br>South<br>Africa |  | Austria Czechoslovakia Germany (Federal Republic) Hungary Iceland Luxembourg (49) | Argentina Chile Costa Rica Cuba Panama Venezuela   | Israel (49)   | Puerto Rico<br>Trinidad and<br>Tobago | 4           |
| 1.1 to 2.0         |                             | Ceylon<br>Japan<br>Philippines<br>Federation of<br>Malaya and<br>Singapore | Greece<br>Italy<br>Poland<br>Portugal (49)  | Brazil<br>Colombia (49)<br>El Salvador<br>Mexico<br>Peru   |   |                                       |             |
| 0.6 to 1.0         | Southern<br>Rhodesia        |  | Spain (49)<br>Yugoslavia  | Ecuador (49)<br>Guatemala  | Egypt<br>Turkey                                     |                                       |             |
| Less than<br>0.6   | Angola                      | Burma<br>India<br>Indonesia<br>Pakistan<br>Thailand                        |   | Bolivia (49)<br>Dominican<br>Republic (49)<br>Haiti (49)<br>Honduras (49)<br>Nicaragua (49)<br>Paraguay (49) | Iran (49)<br>Iraq (49)<br>Lebanon and<br>Syria (49) |                                       |             |

Source: Data supplied by Statistical Division, UNESCO, according to consumption in 1950, except for those countries indicated by (49).

very high, and is a serious hindrance to the spread of education."47

Although the world shortage of newsprint has, since the end of 1951, been considerably alleviated, if new schools and mass literacy campaigns increase the proportion of the world's people demanding reading matter by even a few percentage points, the supply would have to be greatly augmented to meet the new demand. If world per capita consumption were to reach the United States level, world production would have to increase to ten times that of the 1950 level, or to almost 90 million tons. If it were to reach a level adequate to provide an eight-page daily paper for every four persons in each country—roughly the present level of France—production would have to increase to more

than two and a half times that of 1950, or to at least 20 million tons.

Radios and also films and film-strips offer short cuts for the dissemination of information among peoples who are non-literate or who cannot be supplied with appropriate printed material. Most of the people in question, however, live in villages without access to electricity, are unused to mechanical appliances, and have very low cash incomes. Frequently they understand only local vernaculars. They are thus not potential customers for standard commercial radio receiving sets. If they are to be reached by radio programmes, special efforts to meet their needs must be made.

In many countries and territories of Africa, Asia and the Middle East, special broadcasts adapted to the interests of village audiences are now made, and

<sup>&</sup>lt;sup>a</sup> Including Caribbean territories.

<sup>47</sup> ST/TAA/F/Indonesia/R.4, 20 September 1951.

Education

officially sponsored schemes for the provision of collective listening facilities are under way. In India, for example, receivers have been set up in 111 villages of Delhi province, are regularly serviced by technical inspectors, and receive special programmes for the peasant audience. In the Gold Coast there are 178 community receiving sets, and a radio redistribution system serving 8,000 loudspeakers in schools and market places. Daily broadcasts are made in each of four African languages. In Kenya, more than 100 community receiving sets have been set up in local council halls, markets, missions, etc., and broadcasts are made in indigenous languages. Information is not available on the extent of such community facilities in most underdeveloped areas, on the content of the programmes broadcast, nor on the proportion of the populations actually served by them. In most cases, the systems have been initiated fairly recently and are rapidly expanding. It is possible that within a very few years community receiving sets will be the rule over large areas.

In Northern Rhodesia, another type of official programme is rapidly changing the communications picture. Several thousand durable and cheap receiving sets known as "Saucepan Specials" have been imported and their sale to Africans encouraged. Since the price (with batteries) is £6 5s. and the average monthly earnings of Africans are believed to be considerably less than this per family, they are still beyond the reach of much of the population. The Administration hoped, however, that within five years (from 1949) there would be at least one radio in each of the 20,000 villages of the territory. Since the average village comprises only ten to twelve related families, it is believed that this would ensure coverage of the entire rural population. Special efforts are being made to induce African civil servants to buy sets. "Saucepan" radios are now being introduced into Southern Rhodesia and other territories, and the statement that hardly any non-Europeans in Africa own radios may soon cease to be true.

## Appendix A AFRICA

|                          | I<br>Literacy<br>(percentage,<br>criteria,   | II Compulsory schooling (period and estimated effectiveness); duration of  | Primary :<br>(percent | III<br>school enrolment<br>lage of total<br>pulation) | IV  Percentage of total  population | V<br>Post-primary<br>school<br>enrolment<br>(percentage |
|--------------------------|--|--|-----------------------|---|-------------------------------------|---|
|                          | and source<br>of data)   | complete<br>primary course *   | Earlier<br>year       | Latest year known                                     | in 5-14 year<br>age-group b         | of total<br>population)•                                |
| Algeria                  |  | Schooling is compulsory for 8 years (ages 6–14).   | 2.1(1937)             | 3.8(1948)   | 27.0(1948 census) d                 | .4(1948)  |
| Angola                   | •••  | Not compulsory.  | .2(1938)              | .3(1947)  | 25.2(1940)<br>census)               | .1(1947)  |
| Basutoland               | 60-75% of total population literate (1948 estimate; criteria not stated).                      | Primary schooling (5 years of "elementary vernacular", 3 years of "intermediate") is free, may be made compulsory in areas where educational facilities are considered satisfactory. | 15.5(1946)            | 15.9(1949)  | 21-27°                              | .2(1949)  |
| Bechuanaland             |  | Not compulsory.  | 7.2(1945)             | 5.7(1950) <sup>f</sup>                                | 21-27 <sup>g</sup>                  | .1(1950)  |
| Belgian Congo            | 33% of total population baptized, "a great majority" of whom are presumed able to read (1948). | Primary schooling (2 years in "first degree" schools, plus 3 or 4 years in "second degree" schools) is free, not compulsory.   |                       | 8.0(1950)   | 21-27 8                             | .1(1948)  |
| British Somaliland       | c.1% of total population literate (1950 estimate; criteria not stated).                        | Not compulsory; 3-year course.   | .1(1946)              | .4(1950)  | 21-27 8                             |   |
| Cameroons (Br. T.T.)     | c. 5% of total population literate (1949 estimate; criteria not stated).                       | Primary schooling (4-year junior plus 4-year senior course) is not compulsory.   | •••                   | 2.6(1949)   | 21-278                              | .05(1949)   |
| Cameroons (Fr. T.T.)     |  | Not compulsory.  |                       | 4.3 (1950) <sup>h</sup>                               | 21-27 8                             | .05 (1950)  |
| Eritrea                  |  | Not compulsory.  |                       | .9(1950)  | 21-27g                              |   |
| Ethiopia                 |  | Not compulsory.  |                       | .3(1949)  | 21-27 <sup>g</sup>                  | .01(1949)   |
| French Equatorial Africa |  | Free, not compulsory.  | .8(1946)              | 2.0(1950)   | 21-278                              | .1(1949)  |
| French West Africa       |  | Compulsory since 1949 for ages 8-14; 6-year primary course.  | , ,                   | .8(1948) <sup>i</sup>                                 | 21–27 в                             | .04(1948)   |
| Gambia                   | •••  | Not compulsory.  | .8(1945)              | 1.5(1950)   | 21-27 <sup>j</sup>                  | .2(1950)  |
| Gold Coast               | 20% of total population literate (1948 estimate; criteria not stated).                         | Not compulsory and not usually free.   |                       | 7.0(1950)   | 21.3(1950<br>estimate)              | .2(1950)  |
| Kenya                    |  | Compulsory for European children for 8 years (ages 7–15) and for Indian boys in the 3 large towns; not compulsory for Africans.  |                       | 6.6(1950)   | 21-27 <sup>i</sup>                  | .3(1950)  |
| Liberia                  |  |  |                       | 1.5(1950) <sup>k</sup>                                | 21-27 <sup>j</sup>                  |   |
| Libya                    |  | •••  | •••                   | 3.4(1950)1  | 21-27 <sup>j</sup>                  |   |
| Madagascar               | 10% of total population "read the newspapers in the Malagasy language" (1949 estimate).        | Primary schooling is compulsory for 8 years (ages 8-14) for European children, and may be made compulsory for Malagasy children within 5 km. radius from a public school.            | 4.8(1938)             | 5.2(1949)   | 21-27 <sup>j</sup>                  | .2(1949)  |
| Mauritius                | 27.7% of population 10 years of age and over able to read (1944 census).                       | Primary schooling (ages 5–12) is free; compulsion was introduced on an experimental basis in 1945.   |                       | 11.9(1950) <sup>m</sup>                               | 23.1(1944 census)                   | .7(1950) m  |
| Morocco (Fr.)            |  | Not compulsory.  | 1.0(1939)             | 2.0(1949)   | 24-26 n                             | .3(1948)  |

## Appendix A (cont'd) AFRICA (cont'd)

| 0-                     | I<br>Literacy<br>(percentage,<br>criteria,  | II Compulsory schooling (period and estimated effectiveness); duration of   | (percente       | I<br>tool enrolment<br>age of total<br>ulation) | IV  Percentage of total  population | V Post-primary school enrolment (percentage |
|------------------------|---|---|-----------------|---|-------------------------------------|---|
|                        | and source<br>of data)  | complete primary course 2   | Earlier<br>year | Latest year<br>known                            | in 5-14 year<br>age-group b         | of total population)                        |
| Morocco (Sp.)          | •••   |   | •••             | 1.5(1949)°                                      | 21-270                              | .9(1947)                                    |
| Mozambique             | 1% of total population literate (1940 census).  | Not compulsory.   | 1.1(1937)       | 2.3(1946)                                       | 22.6(1940<br>census)                | .1(1946)                                    |
| Nigeria                |   | Not compulsory; 4-year junior primary course, plus senior primary.  | 1.2(1937)       | 4.0(1950)                                       | 21–27¤                              | .1(1950)                                    |
| Northern Rhodesia      |   | Schooling is compulsory for Europeans for 8 years (ages 7-15); and for Africans ages 12-16 in the copperbelt region only.   |                 | 8.8(1950) <sup>q</sup>                          | 12-27¤                              | .1(1950)                                    |
| Nyasaland              | 6.6% of total African population able to read and write (1945 census).  | Not generally compulsory; "experiments have been started in compulsory education in the Central Province." There is an 8-year primary course, including 2 sub-standard years. |                 | 9.5(1950)                                       | 21-27•                              | .1(1949)                                    |
| Portuguese Guinea      |   | •••   | .2(1938)        | .8(1949)  | 21-27¤                              | •••   |
| Réunion                |   | •••   | 13.2(1938)      | 15.3(1948)                                      | 21-27p                              | •••   |
| Ruanda-Urundi          | •••   | Primary schooling is free, not compulsory.  | •••             | 2.7(1950) <sup>r</sup>                          | 21-27¤                              | .04(1950)                                   |
| Sierra Leone           | 28.9% of total population of Colony able to read (1947 census). "In the Protectorate the rate is much lower." | Not compulsory.   |                 | 1.8(1950)                                       | 21-27¤                              | .2(1950)                                    |
| Somaliland (It. T. T.) |   | Free, not compulsory.   | .2(1939)        | .3(1950-<br>51)•                                | 21-27 \$                            | .02(1950-51)                                |
| Southern Rhodesia      |   | Not compulsory for African children.  | •••             | 10.0(1949)                                      | 21-27                               | •••   |
| South-West Africa      | •••   | •••   | 3.3(1937)       | 8.2(1949)                                       | 21-27 <sup>u</sup>                  | • • •                                       |
| Swaziland              | 16% of African population literate in vernacular, 6% in English (1949 estimate).                              | Compulsory for Europeans only.  |                 | 6.9(1950)                                       | 21-27*                              | .1(1950)                                    |
| Tanganyika             |   | Primary schooling (6-year course) is not compulsory; it is free in government schools, usually not free in schools of voluntary agencies.                                     |                 | 2.3(1950)                                       | 21-27*                              | .1(1950)                                    |
| Togoland (Br. T. T.)   | ••••  | Not compulsory and not usulally free.   |                 | 2.3(1950)                                       | 21.0(1950<br>estimate)              | ▼   |
| Togoland (Fr. T. T.)   |   | Free, not compulsory.   |                 | 3.8(1949)                                       | 21-27 <sup>t</sup>                  | .1(1949)                                    |
| Tunisia                |   | Free, not compulsory.   | 3.6(1946) ▼     | 4.4(1950) w                                     | 26.6(1946<br>census)*               | .5(1948)                                    |
| Uganda                 | 30% of population literate (1947 estimate; criteria not stated).  | Not compulsory.   |                 | 3.2(1950) <sup>y</sup>                          | 21-27 <sup>t</sup>                  | .2(1950)                                    |

## Appendix A (cont'd) AFRICA (cont'd)

| I<br>Literacy<br>(percentage,       | II Compulsory schooling (period and estimated effectiveness); duration of complete primary course | III Primary school enrolment (percentage of total population) |                        | IV  Percentage of total                     | V Post-primary school enrolment          |
|-------------------------------------|---|---|------------------------|---|--|
| criteria,<br>and source<br>of data) |   | Earlier<br>year   | Latest year<br>known   | — population<br>in 5-14 year<br>age-group b | (percentage<br>of total<br>population) • |
| Union of South Africa               | Schooling is compulsory for Europeans for 8 or 9 years  | 8.8(1937-38)  | 10.8(1947)             | 20-26*                                      | 1.6(1947)                                |
|                                     | (beginning at age 7) in different provinces, but not for Native or Indian children; it            | 15.6(1937) Africans:  | 14.7(1947)             | 19.0(1948<br>estimate)                      | 4.5(1946)                                |
|                                     | is compulsory for "Coloured" children in some districts of Cape Province and Natal.               | 5.8(1937)   | 8.3(1947)              | 26.2(1936<br>census)                        |  |
|                                     |   | Other non-Eu 14.3(1937)                                       | ropeans:<br>18.4(1947) | census)                                     | .5(1946)                                 |
| Zanzibar                            | Not compulsory.   |   | 3.2(1950) ••           | 21-27ьь                                     | .3(1950)                                 |

· "Complete primary course" means the standard number of pre-secondary years of schooling including, where relevant, "preparatory", "sub-standard", "elementary", "junior primary", "senior primary", and "intermediate" grades, but not including kindergarten or nursery school courses. Quotations in this column are from Compulsory Education and Its Prolongation (International Bureau of Education, Publication No. 133) unless otherwise noted.

wise noted.

b The period of primary schooling, whether four, six, eight, or other number of years in length, normally falls within the ten-year period between the ages of 5 and 14, inclusive. Where the complete primary course takes six years and all children are enrolled, primary enrolment should be about 60 per cent of the 5-14 year age-group. The figures for given countries in columns III and IV usually refer to different years and are not strictly comparable. However, roughly speaking, if the figure in column comparable. However, roughly speaking, if the figure in column III is less than 60 per cent as large as that in column IV, it normally indicates that a standard of universal schooling for

six years has not been reached. See p. 62 of text.

"Post-primary" includes enrolment in secondary, technical, and higher institutions, but not in part-time adult education

courses.

d 28.2 per cent for Moslems, 17.7 per cent for non-Moslems.

Enrolment in Moslem schools in 1947 totalled about 2 per cent
of the Moslem population. Enrolment in French schools (including some Moslems) totalled about 15 per cent of the size of the European population.

<sup>e</sup> Estimated range; see p. 62 of text.
<sup>f</sup> Enrolment varies widely from year to year "due to seasonal migration to . . . cattle posts according to rainfall".

Estimated range; see p. 62 of text.

Not including "bush" schools nor Koranic schools.

- i Not including Koranic schools, schools of nomadic tribes, schools opened by chiefs, nor catechism centres of various mis
  - i Estimated range; see p. 62 of text.

k All schools.

1 Not including Koranic schools.

m Government and grant-aided schools only.
Estimated range; in 1947, 22.5 per cent of Moroccans were aged 6-14 (estimate) and 17.2 per cent of non-Moroccans were aged 5-14. About 1 per cent of the Moroccan Moslem population were enrolled in primary schools (not including private Koranic schools) in 1949, while about 12 per cent of the non-Moroccan (European) population were enrolled; about .02 per cent of the Moslem population were enrolled in secondary schools.

<sup>o</sup> Spanish schools, Moslem schools, and Jewish schools. Data for Ceuta and Melilla seem to be incomplete.

P Estimated range; see p. 62 of text. a Schools for Africans only.

Not including the catechism centres of various missions.
Not including Italian schools and primary night schools for adults.

t Estimated range; see p. 62 of text.

<sup>u</sup> 22.4 per cent for European population (1936 census). v Most post-primary students from Togoland enrol in Gold Coast institutions.

Including Koranic schools.
 19.1 for Europeans, 27.1 for Moslems.
 Not including pupils in unaided schools and catechuminates.

Estimated range.

• Government and grant-aided schools only. bb Estimated range; see p. 62 of text.

## ASIA

|                                | I Literacy (percentage,   | II  Compulsory schooling (period and estimated effectiveness);  | (percenta       | II<br>hool enrolment<br>ge of total<br>ulation) | IV Percentage of total                    | V<br>Post-primary<br>school<br>enrolment |
|--------------------------------|---|---|-----------------|---|---|--|
|                                | criteria,<br>and source<br>of data)   | duration of<br>complete<br>primary course   | Earlier<br>year | Latest year<br>known                            | — population<br>in 5–14 year<br>age-group | (percentage<br>of total<br>population)   |
| British Borneo                 |   | 6-year primary course; in Brunei schooling is compulsory for Malay children 7-14 years of age and living within 2 miles of a school.  | 3.4(1946)       | 6.5(1950)                                       | 25.6 (Sarawak<br>only; 1947<br>census)    | .2(1950)                                 |
| Burma                          | 41% of population literate (1931 census).   | Compulsory schooling (ages 6-11) is now being applied to suburban part of city of Rangoon; plan to cover children between 6 and 11 years of age in this area by 1954-55.  | 3.4(1937)       | 2.5(1947)                                       | 21-27 <sup>b</sup>                        |  |
| Ceylon                         | 57.8% of population 5 years of age and over able to read (1946 census).   | 6-year primary course (incl. 2 years of "infant school"). Schooling is compulsory for 9 years (between ages of 5-14).   | 11.5(1937)      | 13.9(1949)                                      | 24.3(1946 census)                         | 3.1(1949)                                |
| China                          | 53% of population literate (1946 estimate; criteria not stated).  | In Formosa schooling is compulsory for 6 years (ages 6-12).   | 2.8(1937)°      | 5.2(1946) <sup>a</sup>                          | 21-27•                                    | .3(1945)                                 |
| Federation of Malaya.          | 38% of population<br>15 years of age and<br>over able to read<br>(1947 census).   | The 6-year primary course is free, may be made compulsory for Malay boys between ages of 6 and 12 "who live within reasonable distance of a Government Malay School".   |                 | 11.4(1949)                                      | 27.0(1947<br>census)                      | .7(1949)                                 |
| French India                   |   |   | . • • •         | 4.5(1949)                                       | 21-27°                                    |  |
| Hong Kong                      | •••   | Not compulsory, usually not free.   | 4.9(1946)       | 6.1(1950)                                       | 15-20 <sup>f</sup>                        | 1.8(1950)                                |
| India                          | 9.1% of population<br>10 years of age and<br>over able to read<br>and write (1931<br>census).*<br>c. 20% of popula-<br>tion 6 years of age<br>and over literate<br>(1950 estimate;<br>criteria not stated). | Schooling is compulsory for periods of 4 to 8 years (usually beginning at age of 6) in some areas of 9 states; the areas are gradually being extended. Attendance in most states is "much higher in the urban than in the rural areas". | 2.8(1937)*      | 4.6(1948–49)                                    | 21-27 <sup>h</sup>                        | 1.4(1948-49)                             |
| Indochina                      |   |   | 2.7(1938)       | 1.6(1948) <sup>i</sup>                          | 21-27;                                    | .05(1947)                                |
| Indonesia                      |   | 6-year primary course not compulsory.   | 3.3(1936–37)    | 5.6(1949–50)                                    | 21-27 <sup>j</sup>                        | .2(1947-48)                              |
| Japan                          | Over 95% of adult population believed to be literate.   | 6-year primary course (ages 6-11) and 3-year lower secondary course (ages 12-14) are compulsory.  | 16.8(1937)1     | 13.2(1950)                                      | 22.0(1950<br>census)                      | 8.5(1950)                                |
| Korea                          | 31.4% of the population 10 years of age and over able to read and write (1930 census).  |   | 4.0(1937)       | 11.6(1948:<br>Republic of<br>Korea)             | 26.2(1944<br>census)                      |  |
| Macau                          |   |   |                 | 3.3(1948)                                       |   |  |
| Mongolian People's<br>Republic |   |   |                 |   | 21-27 <sup>i</sup>                        |  |
| Nepal                          |   |   |                 | • • •   | 21-27 <sup>j</sup>                        |  |
| Pakistan                       |   | Schooling is to be made compulsory for 5 years (ages 6–11) as soon as possible.   |                 | 4.6(1950-<br>51) <sup>m</sup>                   | 21-27°                                    |  |

## Appendix A (cont'd) ASIA (cont'd)

|                  | I<br>Literacy<br>(percentage,<br>criteria.   | II Compulsory schooling (period and estimated effectiveness); duration of   | III  Primary school enrolment  (percentage of total **  population) |                      | IV  Percentage of total  population | V Post-primary school enrolment (percentage |
|------------------|--|---|---|----------------------|-------------------------------------|---|
| -0-              | and source<br>of data)   | complete<br>primary course  | Earlier<br>year   | Latest year<br>known | in 5-14 year<br>age-group           | of total<br>population)                     |
| Philippines      | 61% of population<br>10 years of age and<br>over literate (1948<br>census; provisional<br>result). | The first 4 years of the 6-year elementary school course (beginning at age of 7) are compulsory for children living within 3 km. of a school and not prevented from attending "by the economic circumstances of their parents".       | 9.2(1937)   | 19.6(1949)           | 26.2(1946<br>estimate)              | 2.4(1947)                                   |
| Portuguese India | 19% of total population literate (1940 census).  |   | •••   | 1.9(1947)            | 21-27р                              |   |
| Portuguese Timor |  |   |   | .1(1948)             | 21-27 <sup>p</sup>                  |   |
| Ryukyu Is        | •••  |   | `   | 22.2(1949)           | 25.2(1947 census)                   | 1.5(1949)                                   |
| Singapore        | 37.4% of total population able to read (1947 census).  | The 6-year primary course is free, not compulsory.  | 7.4(1946)   | 11.5(1949)           | 23.8(1947 census)                   | 1.2(1949)                                   |
| Thailand         | 40% of population literate (1947 census; criteria not stated).                                     | Primary schooling, consisting of a "preparatory" course which may take one or more years (until the pupil has learned to read and write) and a 4-year graded course, is compulsory for children (ages 7-14) within 2 km. of a school. | 8.6(1937–38)  | 14.4(1949–50)        | 27.2(1947<br>census)                | .7(1949–50)                                 |

<sup>Brunei, North Borneo, Sarawak.
Estimated range; 23.6 in 1931 (census).
Not including Formosa and Manchuria.</sup> 

d Estimates both of population and school enrolment in China vary widely, and the percentage given may not reflect the present

<sup>Estimated range; see p. 62 of text.
Estimated range; 16.3 in 1931 (census).
Including Pakistan. Excluding the Agencies and tribal areas in the Northwest Frontier Province.
Estimated range; 24.6 for India (including Pakistan) in 1931</sup> 

i Vietnam only. 2.7 per cent in 1947 according to estimates in reports on "La protection de l'enfance et de la jeunesse" sub-

mitted to the United Nations in 1947 by the Governments of Cambodia, Laos and Vietnam.

i Estimated range; see p. 62 of text.

Estimates vary widely.

Owing to a complete revision of the educational laws in 1946, data are not comparable as between 1937 and 1950.

m Percentage based on official estimate in report presented to Fourteenth International Conference on Public Education.

n Estimated range; 24.6 for India (including Pakistan) in 1931

o This percentage is enlarged by a number of children unable

to attend school during the war and thus enrolled in primary school after the normal age period.

P Estimated range; see p. 62 of text.

## EUROPE

|                | I Literacy (percentage, criteria,   | II Compulsory schooling (period and estimated effectiveness); duration of  | Primary so<br>(percent  | II<br>hool enrolment<br>tage of total<br>bulation) | IV  Percentage of total                   | enrolment            |
|----------------|---|--|-------------------------|--|---|----------------------|
|                | and source<br>of data)  | complete<br>primary course   | Earlier<br>year         | Latest year<br>known                               | — population<br>in 5–14 year<br>age-group | of total population) |
| Albania        |   |  | 5.1(1935) a             |  | 18-22 b                                   |                      |
| Austria        | Over 95% of adult population believed to be literate.   | Schooling is compulsory for 8 years (ages 6-14).   | 11.7(1937)              | 11.8(1948)   | 14.7(1939<br>census)                      | 1.5(1948)            |
| Belgium        | 94.4% of population 7 years of age and over able to read and write (1930 census).   | An 8-year primary course (ages 6-14) is compulsory except for children going on to secondary school, who begin the latter after the sixth primary year.      | 11.6(1937)              | 9.0(1948)  | 12.9(1950<br>estimate)                    | 3.8(1948)            |
| Bulgaria       | 68.6% of population 10 years of age and over able to read and write (1934 census). 86% literate (1948 estimate; criteria not stated). | 7 years of primary schooling<br>(beginning at age 7) are com-<br>pulsory except for children<br>who begin secondary school<br>after the fourth primary year. | 15.3(1938)              | 12.9(1947)   | 18.2(1945<br>estimate)                    | 3.6(1947)            |
| Czechoslovakia | 95.9% of population 10 years of age and over able to read (1930 census).  | Schooling is compulsory for 9 years (ages 6-15), plus full or part-time (vocational) schooling up to age of 17.  | 16.5(1936)              | 12.9(1947)   | 14.9(1947 census)                         | 3.7(1947)            |
| Denmark        | Over 95% of adult population believed to be literate.   | Schooling is compulsory for 7 years (ages 7–14), and usually consists of 5 years of primary and 2 of secondary school.                                       | 10.9(1937–38)           | 10.2(1949)   | 15.9(1949<br>estimate)                    | 4.7(1947)            |
| Finland        | 99.1% of population 15 years of age and over able to read (1930 census).  | Schooling is compulsory for 8 years (ages 8-15).   | 13.2(1936)              | 12.2(1948-49)                                      | 16.6(1949)                                | 2.5(1948–49)         |
| France         | 96.2% of population 10 years of age and over able to read (1936 census).  | The 8-year primary course 1 (ages 7-14) is compulsory, plus full or part-time (vocational) schooling up to age of 17.  | <b>3.2(1938)</b> 1      | 10.6(1950) <sup>d</sup>                            | 13.0 (1950 estimate)                      | 2.7(1948)            |
| Germany        | Over 95% of adult population believed to be literate.   | Schooling is compulsory for 8 years (ages 6-14). Primary courses are of varying length, usually 4, 6, or 8 years.  | 11.5(1937)              | 13.4(1950)*  | 17.1(1950 census; Federal Republic only). |                      |
| Greece         | 59.2% of population 10 years of age and over able to read and write (1928 census).  | Schooling is compulsory for 6 years (ages 7–13). The law is difficult to enforce and attendance of many children not continuous.                             | 14.4(1937) <sup>f</sup> | 11.5(1949-<br>50)¢                                 | 18.5(1949 estimate).                      | •••                  |
| Hungary        | 94.0% of population 10 years of age and over able to read (1941 census).  | Schooling is compulsory for 8 years (ages 6-14).   | 10.5(1938)              | 11.9(1948)   | 17.6(1941 census).                        | .8(1948)             |
| Iceland        | Over 95% of adult population believed to be literate.   | Schooling is compulsory for 8 years (ages 7-15).   | 12.5(1937)              | 11.3(1950)   | 17.9(1949<br>estimate)                    | pto 0                |
| Ireland        | Over 95% of adult population believed to be literate.   | The 8-year primary course (ages 6-14) is compulsory.   | 16.3(1937)              | 15.2(1947)   | 17.9(1946 estimate).                      | 7.8(1947)            |

# Appendix A (cont'd) EUROPE (cont'd)

|             | I Literacy (percentage,   | II Compulsory schooling (period and estimated effectiveness); duration of   | (percenta              | I<br>ool enrolment<br>ge of total<br>ation) | IV Percentage of total                    | V<br>Post-primary<br>school<br>enrolment |
|-------------|---|---|------------------------|---|---|--|
|             | criteria,<br>and source<br>of data)   | complete primary course   | Earlier<br>year        | Latest year known                           | - population<br>in 5–14 year<br>age-group | (percentage<br>of total<br>population)   |
| Italy       | 78.4% of population 10 years of age and over able to read (1931 census). 89% literate (1948 estimate; criteria not stated). | The 5-year primary course and 3 years' secondary or vocational schooling (ages 6-14) are compulsory except in communes where provision for 8 years of schooling does not exist.               | 11.6(1938)             | 10.7(1947–48)                               | 17.4(1949 estimate).                      | 2.0(1947-48) <sub>q</sub>                |
| Luxembourg  | Over 95% of adult population believed to be literate.   | Schooling is compulsory for 8 years (ages 6-14), plus 2 years of part-time continuation classes.  |                        | 11.1(1948-49)                               | 13.3(1947 census).                        | 1.9(1948-49)                             |
| Malta       |   |   | 15.9(1946)             | 12.6(1948)                                  | •••                                       | .2(1946)                                 |
| Netherlands | Over 95% of adult population believed to be literate.   | Schooling is compulsory for 8 years (ages 6–14 or 7–15); a primary course of 6 to 8 years is combined with various types of "advanced elementary", secondary and technical schools.           | 13.3(1937)             | 13.6(1950)                                  | 17.4(1950 estimate)                       | 5.3(1948);                               |
| Norway      | Over 95% of adult population believed to be literate.   | Schooling is compulsory for 7 years (ages 7-14), plus a year of continuation classes in some communes.  | 11.8(1938)             | 9.4(1947)                                   | 13.9(1949 estimate).                      | 1.5(1945) k                              |
| Poland      | 76.9% of population 10 years of age and over able to read (1931 census).  | Schooling is compulsory for 11 years (ages 7–18).   | 14.2(1938)             | 14.0(1948)                                  | 18.1(1949 estimate).                      | 2.8(1948)                                |
| Portugal    | 51.3% of population 10 years of age and over able to read (1940 census).  | The primary course of 4 years (to be completed between 7 and 12) is compulsory. <sup>1</sup>  | · · ·                  | 7.3(1949)                                   | 19.0(1949<br>estimate)                    | 1.2(1948–49)                             |
| Romania     | 76.9% of population 7 years of age and over able to read (1948 census).   |   | 12.6(1938)             | •••   | 19–21 <sup>m</sup>                        | ••                                       |
| Saar        | •••   | •••   | •••                    | •••   | •••                                       | •••                                      |
| Spain       | 76.8% of population 10 years of age and over able to read (1940 census).  | Schooling is compulsory for 6 years (ages 6–12).  | 9.9(1936) <sup>n</sup> | 11.2(1947–<br>48) <sup>n</sup>              | 21.3(1940 census)                         | 1.5(1947–48)                             |
| Sweden      | 99.9% of population 10 years of age and over able to read (1930 census).  | The 7-year primary course (ages 7-14) is compulsory in some districts an 8th compulsory year has been added elsewhere a year of part-time classes is compulsory.                              |                        | 8.8(1949–50)                                | 13.4(1948 estimate).                      | 3.8(1948)                                |
| Switzerland | Over 95% of adult population believed to be literate.   | Primary courses and the compulsory period range from 7 to 9 years in different cantons. Secondary education for children entering it, however, begins after the third or fourth primary year. | ·<br>-                 | 9.4(1948)                                   | 14.3(1949<br>estimate)                    | 2.3(1947)                                |
| Trieste     | • • • •   | •••   | •••                    | • • •                                       | •••                                       | •••                                      |

## Appendix A (cont'd) EUROPE (cont'd)

| 1                  | I<br>Literacy<br>(percentage,   | II Compulsory schooling (period and estimated effectiveness); duration of complete primary course          | III<br>Primary school enrolment<br>(percentage of total<br>population) |                      | IV  Percentage of total                   | V Post-primary school enrolment        |
|--------------------|---|--|--|----------------------|---|--|
|                    | criteria,<br>and source<br>of data)   |  | Earlier<br>year  | Latest year<br>known | — population<br>in 5–14 year<br>age-group | (percentage<br>of total<br>population) |
| United Kingdom     |   |  |  |                      |   |  |
| England and Wales. | Over 95% of adult population be-<br>lieved to be liter-   | Schooling is compulsory for 10 years, usually 2 years "infant school", 4 primary                           | 12.3(1937-<br>38) <sup>q</sup>   | 9.0(1948–<br>49)     | 13.50(1950<br>estimate)                   | 4.5(1948-49)                           |
| Northern Ireland   |   | and 4 secondary (ages 5-15);<br>compulsory part-time school-<br>ing up to age of 18 is to be               | 15.4(1937–<br>38) <sup>q</sup>   | 13.8(1948–<br>49)    | 17.9(1950<br>estimate)                    | 3.4(1948-49)                           |
| Scotland           |   | enforced as soon as practi-<br>cable.  |  | 10.6(1949)           | 15.6(1950<br>estimate)                    | 8.3(1948-49)                           |
| Yugoslavia         | 75% of population<br>10 years of age and<br>over literate (1948<br>census; criteria not<br>stated). | Schooling is compulsory for 8 years (4 years of primary plus 4 years of "continuation primary" or lyceum). | 9.1(1938)  | 10.1(1950)           | 22.1 (1948<br>census)                     | 1.9(1950) <sup>r</sup>                 |

• Public schools only.
• Estimated range; see p. 62 of text.

Estimated range; see p. 62 of text.
Not including primary grades of secondary schools.
Not including students in part-time continuation courses.
Federal Republic only.
Not including Moslem schools in Thrace.
Not including night schools.
Not including higher institutions.
Not including private primary schools.
Including "advanced elementary" schools.
Secondary enrolment for 1945, technical for 1947, higher for 1948.

1948.

1 "Some difficulty is experienced in getting agricultural small-holders to send their children to school, as the latter are engaged at an early age on work in the fields."

m Estimated range; 16.2 per cent in 7-14 age-group in 1948 (census).

n Not including private schools.

" Not including private schools.

" Attendance is higher and more regular in the towns than in the rural areas."

P Not including technical schools. In 1945, 4.5 per cent of the population were enrolled in technical schools, apparently mostly part-time.

<sup>q</sup> Public and grant-aided schools only. Owing to changes in the school system, 1937-38 and 1948-49 data for England and Wales are not comparable.

Including "workers' technical schools".

## LATIN AMERICA

|                    | I Literacy (percentage, criteria,   | II Compulsory schooling (period and estimated effectiveness); duration of  | Primary s<br>(percen | II<br>chool enrolment<br>stage of total<br>pulation) | IV  Percentage of total  population                                     | V Post-primary school enrolment (percentage |
|--------------------|---|--|----------------------|--|---|---|
|                    | and source<br>of data)  | complete<br>primary course   | Earlier<br>year      | Latest year known                                    | <ul> <li>population</li> <li>in 5-14 year</li> <li>age-group</li> </ul> | of total<br>population)                     |
| Argentina          | 83.4% of population 14 years of age and over able to read; percentages ranged from 92.3 in Federal Capital to 63.7 in Jujuy province (1943 estimate). | Schooling is compulsory from<br>the age of 6 or 7. The pri-<br>mary course is of 6 or 7 years'<br>duration; in the latter case,<br>pupils attend school half-<br>days only during the first 2<br>years.* | 13.7(1939)           | 12.6(1948)   | 19.5(1947<br>census)  | 2.0(1949) b                                 |
| Bolivia            | 20% of population literate (1943 estimate; criteria not stated).  | The 6-year primary course (ages 7-13) is compulsory; rural schools, however, offer only 4 years. <sup>4</sup>  | 3.0(1935)            | 4.6(1950)  | 21-27°  | .6(1950)                                    |
| Brazil             | 43.3% of population 10 years of age and over able to read and write (1940 census).  | The primary course of 4 years (to be completed between 7 and 12) is compulsory; an additional "primary complementary" year is required before secondary school.  | 7.5(1937) t          | 9.8(1948)‡   | 26.9(1940 census)   | 1.2(1946)                                   |
| Chile              | 71.8% of population 10 years of age and over able to read (1940 census).  | Schooling is compulsory for 8 years (ages 7-15).   | 12.7(1940)           | 13.1(1949)   | 24.7(1940 census)   | 2.7(1949)                                   |
| Colombia           | 55.8% of population 10 years of age and over able to read (1938 census).  | The primary course of 5 years (ages 7-12) is compulsory except for children living more than $2\frac{1}{2}$ km. from the nearest free school. <sup>h</sup>   | 8.0(1937)            | 7.2(1947)¤   | 26.6(1938 census)   | .7(1947)*                                   |
| Costa Rica         | •••   | Schooling is compulsory for 6 years (ages 7-13).   | 10.4(1937)           | 11.0(1947)   | 21-27   | .9(1950)                                    |
| Cuba               | 71.3% of population 10 years of age and over able to read (1943 census).  | The 8-year primary course (ages 6-14) is compulsory except for children living more than 2 km. from a school. <sup>j</sup>   | 13.1(1942)           | 11.5(1949-<br>50) k                                  | 23.2(1943 census)   | .9(1942)                                    |
| Dominican Republic | 26% of population 7 years of age and over literate (1935 census; criteria not stated).  | Schooling is compulsory for 7 years (ages 7-14); the primary course is 6 years, plus 2 "intermediate" years. m   | 6.8(1936)            | 10.4(1949-50)  | 21-271  | .8(1949–50)                                 |
| Ecuador            | 21% of population literate, 19% semiliterate (1950 estimate; criteria not stated).  | The primary course of 6 years (in urban schools) and 4 years (in rural schools) is compulsory, except for children living more than 5 km. from nearest school.   | 6.4(1938)            | 7.8(1948-49)   | 21-27ª  | .8(1948–49)                                 |
| El Salvador        | 27.2% of population 8 years of age and over able to read (1930 census).   | The primary course of 6 years (ages 7-14) is compulsory.   | 5.0(1937)            | 7.6(1950)  | 26.0(1944<br>estimate)  | .3(1947)                                    |
| Guatemala          | 34.6% of population 7 years of age and over able to read (1950 census).   | Schooling is compulsory for 8 years (ages 6-14). There is a 6-year primary course in urban schools, a 3-year course in rural schools.  | 5.8(1938)            | 5.8(1950)  | 27.9(1940 census)   | .5(1949–50) <sup>q</sup>                    |
| Haiti              | c. 15% of adult population "able to speak and write French" (1949 estimate).  | Schooling is compulsory for 6 years (ages 7-13).   | 1.1(1937)            | 1.5(1950)•   | 21-27*  | .3(1946)*                                   |
| Honduras           | 33.7% of population 7 years of age and over able to read (1945 census).   | The primary course in urban schools is 6 years, in rural schools 3 years. Schooling is compulsory for 8 years (ages 7-15), except for children living over 3 km. from the nearest school."               | 4.0(1937)            | 6.1(1949)  | 25.6(1945<br>census)  | .4(1947)                                    |

### Appendix A (cont'd) LATIN AMERICA (cont'd)

|           | I<br>Literacy<br>(percentage,  | II Compulsory schooling (period and estimated effectiveness); duration of   | III<br>Primary school enrolment<br>(percentage of total<br>population) |                      | IV  Percentage of total  population | V<br>Post-primary<br>school<br>enrolment |
|-----------|--|---|--|----------------------|-------------------------------------|--|
|           | criteria,<br>and source<br>of data)  | complete primary course   | Earlier<br>year  | Latest year<br>known | in 5-14 year<br>age-group           | (percentage<br>of total<br>population)   |
| Mexico    | 48.9% of population 10 years of age and over able to read (1940 census).                 | The 6-year primary course (to be completed between ages 6 and 14) is compulsory.*                                 | 10.4(1937)   | 11.7(1949)           | 26.6(1940 census)                   | .8(1949)                                 |
| Nicaragua | 37.7% of population 7 years of age and over literate (1940 census; criteria not stated). | The 6-year primary course (ages 7-14) is compulsory.▼   | 5.7(1938)  | 8.5(1950)            | 26.6(1940 census)                   | 1.1(1948)*                               |
| Panama    | 64.7% of population 10 years of age and over able to read (1940 census).                 | The primary course of 6 years (to be completed between 7 and 15) is compulsory.*                                  | •••  | 13.7(1950)           | 24.7(1940 census)                   | 2.4(1949)                                |
| Paraguay  |  | Schooling is compulsory for 4 years or up to age of 14; the complete primary course is 6 years.                   | 14.9(1937)   | 13.9(1950)           | 21-27 a a                           | .8(1947)                                 |
| Peru      | 43.4% of population 10 years of age and over able to read (1940 census). bb              | Schooling is compulsory for 5 years (to be completed before age of 16).   | 7.0(1937) dd   | 11.4(1950)           | 26.6(1940 census)                   | 1.1(1949)                                |
| Uruguay   | 85% of population literate (1938 estimate; criteria not stated).                         | Schooling is compulsory for 8 years (ages 6-14). Urban primary schools comprise 6 classes, rural schools only 4.° | ` '  | 9.0(1949–50)         | 16–2011                             | •••                                      |
| Venezuela | 43.4% of population 10 years of age and over able to read (1941 census).                 | The primary course of 6 years (ages 7-13) is compulsory. **   | 6.7 (1938)   | 10.1 (1949–50)       | 25.6(1945 estimate)                 | .8(1947)                                 |

"Attendance is higher and more regular in urban areas than in the suburban and rural areas where population is less dense and communications difficult."

<sup>b</sup> Secondary establishments coming under the Ministry of Education and universities; not including technical and agricultural schools.

 Estimated range; see p. 62 of text.
 "It is mainly in the rural areas that attendance is unsatisfactory. This is due to . . . low population density, insufficient roads, poor transport facilities, shortage of schools and a low standard of living.

"The number of children wishing to be enrolled generally exceeds the number that the primary schools can take, and the need to remind people that schooling is compulsory therefore does not arise.

Including kindergartens.

Excluding 1,563 primary schools (out of 13,074) and 270 secondary schools (out of 713) not reporting.

h "Attendance proves most difficult in the rural areas, either on account of long distances and primitive transport, or because parents need their children to do seasonal work such as sowing and harvesting.

i Estimated range; 25.7 in 1927 (census).
i "Attendance in rural areas is decidedly lower than in towns, on account of the greater distances, the lack of transport, hills, bad weather conditions, and the demands of agriculture.

k Not including pre-primary grades.

Estimated range; 29.8 in 1935 (census).

"Rural schools offer 3-year or 2-year courses; the latter are classified as "emergency schools" to combat illiteracy.

<sup>n</sup> Estimated range; see p. 62 of text. o "In rural areas children are often called on to work, and attendance is therefore less regular than in the towns."

"In practice, however, even in the towns, not all schools are able to provide a 6-year course, and most of the rural schools provide only the first two years."

Not including higher enrolment.

r "A large number of children in rural areas have to be partially or totally exempted from compulsory education on account of

the poverty of their parents or of lack of schools."

Based on approximate population estimate. Estimated range; see p. 62 of text.

" "Attendance is lowest in the rural areas, and the main obstacles to it are of an economic order: poverty, lack of suitable premises, materials and furniture."

Y "Adverse economic conditions and an insufficient and the main order."

Adverse economic conditions and an insufficient number of schools are the main obstacles . . . Their influence is stronger in

rural than in urban areas.

w "Fewer obstacles are encountered in urban areas . . . than in rural areas, where children are expected to take part in agricultural work."

\* Not including higher enrolment.

\* Excluding tribal Indians.

"The chief obstacle . . . is the yearly need for new schools, due to the increase of enrolments.

as Estimated range; see p. 62 of text.

bb Population actually enumerated, not including estimate for under-enumeration and jungle population.

°° "Failure to enrol or repeated absence from school has a number of causes: the use of children for the seasonal work of sowing and harvesting, or as servants; the low educational level of parents, leading them to set little or no store on schooling; a low economic level, especially among the native population; teachers' ignorance of the native language, and the natives' ignorance of Spanish."

dd Public schools only.

o "At rural schools . . . children may be allowed to leave school at 10 or 12." "Attendance is less satisfactory in the rural areas, where distances are long, population sparse, and communications

" Estimated range; Uruguay, a comparatively urbanized country with birth and death rates lower than those of other Latin-American countries except Argentina, probably approaches the

population pattern of the latter.

"Failure to comply . . . is more frequent in rural than in urban areas, on account of adverse economic conditions and the children's wish to help their parents . . . (also) the low cultural level and long distances in sparsely populated areas.

#### MIDDLE EAST

|                              | I<br>Literacy<br>(percentage,  | II<br>Compulsory schooling<br>(period and estimated<br>effectiveness);  | Primary s<br>(percen | II<br>chool enrolment<br>lage of total<br>pulation) | IV  Percentage of total                   | V<br>Post-primary<br>school<br>enrolment |
|------------------------------|--|---|----------------------|---|---|--|
|                              | criteria,<br>and source<br>of data)  | duration of<br>complete<br>primary course   | Earlier<br>year      | Latest year<br>known                                | — population<br>in 5-14 year<br>age-group | (percentage<br>of total<br>population)   |
| Aden Colony and Protectorate |  | Not compulsory.   |                      | 1.0(1948) *   | 21-27ь                                    | .2(1948)                                 |
| Afghanistan                  |  | 6-year primary course.º   |                      | .7(1951)  | 21-27 <sup>d</sup>                        | .03(1949)                                |
| Anglo-Egyptian Sudan         |  |   |                      | 1.4(1948)   | 21-27d                                    | .03(1948)                                |
| Cyprus                       | 56.1% of total population able to read (1946 census).                              | The 6-year primary course is free but not compulsory.   |                      | 12.5(1950)  | 21.2(1948<br>estimate)                    | 2.3(1950)                                |
| Egypt                        | 14.8% of population 10 years of age and over able to read and write (1937 census). | Schooling is compulsory for 6 years (ages 6-12), except for children more than 2 km. from the nearest school. <sup>8</sup>  | 7.5(1937)•           | 6.7(1949)•  | 21-27 <sup>f</sup>                        | .8(1948)                                 |
| Iran                         |  | The 6-year complete primary course (ages 6-12) is legally compulsory, but "on account of lack of facilities" the compulsory period is at present limited to 4 years.  | 1.3(1937)            | 3.6(1950)   | 21-27 <sup>h</sup>                        |  |
| Iraq                         |  | The primary school course of 6 years is compulsory, but the law is not enforced.  | 1.8(1937)            | 3.8(1949)   | 21-27 <sup>h</sup>                        | .6(1948)                                 |
| Israel                       |  | Schooling is compulsory for 8 years (to be completed between ages of 5 and 18).   | •••                  | 13.4(1948) <sup>k</sup>                             | 16.3 (Jewish population; 1949 estimate).  | 2.8(1948) k                              |
| Jordan                       | •••  | The 7-year primary course (ages 7-14) is compulsory.  | 4.3(1937)            | 6.5(1948)   | 30.4(1950<br>estimate)                    | .3(1948                                  |
| Kuwait                       |  |   |                      | 2.2(1949)1  | 21-27 <sup>m</sup>                        | .7(1949)                                 |
| Lebanon                      |  | Schooling is compulsory for 5 years (ages 6-11).  | 14.9(1937)           | 16.0(1949)  | 21-27 <sup>m</sup>                        | 2.9(1947)                                |
| Muscat and Oman              |  | •••   |                      |   |   | *  |
| Saudi Arabia                 |  | The 6-year primary course is free, but not compulsory.  |                      | .5(1949-<br>50) <sup>n</sup>                        | 21-27) <sup>m</sup>                       | .02(1949-5                               |
| Syria•                       | 40-50% of population literate (1947 estimate; criteria not stated).                | The 5-year primary course (ages 6-11) is compulsory.  | 4.0(1937)            | 8.1(1950)   | 21-27 <sup>m</sup>                        | 1.1(1949-50                              |
| Turkey                       | 30% of population<br>7 years of age and<br>over literate (1945<br>census)          | The 5-year primary course (to be completed between 7 and 16) is compulsory. 80% of urban and 55% of rural children are believed to be enrolled. A 3-year "intermediate" course also precedes secondary schooling. | 4.2(1937)            | 8.4(1949–50)  | 26.4(1945<br>census)                      | .9(1948–49)                              |
| Yemen                        |  |   |                      |   | 21-27 m                                   |  |

Population estimates exclude nomads.

<sup>■</sup> Including Koranic schools.

b Estimated range; 21.8 in Aden Colony in 1948 (census).

c "Although the Afghan Constitution provides for compulsory free education for all . . it is very difficult, owing to tremendous economic, social, and geographical obstacles . . to make an all-out effort to reach the goal set up by the Constitution."

d Estimated range; see p. 62 of text.

l Including elementary, kindergarten and preparatory schools.

f Estimated range; 25.9 in 1937 (census).

"Enrolment is higher in the urban than in the rural areas."

b Estimated range; see p. 62 of text.

i "Attendance is generally lower in rural areas than in the towns."

i Attempts to apply compulsory provisions in two provinces failed, due to "poverty of the majority of parents who were unable to dispense with the labour of their children on the land, the mobility of part of the population which was still in a seminomadic state, and the inability to persuade teachers to live in remote villages where housing facilities and other amenities are most inadequate." (Compulsory Education in Iraq, UNESCO Studies on Compulsory Education No. 4, p. 16.)

k Jewish population and school enrolment.

Including kindergartens.

Estimated range; see p. 62 of text.

Based on approximate population estimates.

Population estimates exclude nomads.

## NORTHERN AMERICA AND CARIBBEAN TERRITORIES

|                            | I Literacy (percentage, criteria, and source of data)   | II Compulsory schooling (period and estimated effectiveness); duration of complete primary course   | III Primary school enrolment (percentage of total population) |                                | IV Percentage of total  | V Post-primary school enrolment        |
|----------------------------|---|---|---|--------------------------------|---|--|
|                            |   |   | Earlier<br>year   | Latest year known              | <ul> <li>population</li> <li>in 5-14 year</li> <li>age-group</li> </ul> | (percentage<br>of total<br>population) |
| Canada                     | 96.2% of population 10 years of age and over able to read (1931 census, excluding Newfoundland), 88.0% of Newfoundland population 10 years and over able to read (1945 census). | Schooling is compulsory for 8 years (average duration).   | 17.9(1937–38)   | 13.8(1947–48)                  | 17.9(1950<br>estimate)  | 4.0(1947–48)                           |
| United States              | 95.7% of population 10 years of age and over able to read and write (1930 census).  | Schooling is compulsory for 8 years (7 states); 9 years (33 states); 10 years (4 states); 11 years (3 states); 12 years (1 state). School entering and leaving ages, length of primary course, and other requirements vary from state to state. | 15.6(1937–38)   | 12.4(1947–48)                  | 16.7(1950<br>estimate)  | 6.6(1947–48)                           |
| Barbados                   |   | Primary schooling is free, not compulsory.  | 16.1(1942)  | 14.6(1950)                     | 21.3(1946<br>census)  | 2.4(1950)                              |
| British Guiana             | 52.5% of total population able to read (1946 census). 78% literate (1940 estimate; criteria not stated).  | Schooling is compulsory between the ages of 6 and 14.   | 16.9(1945)  | 18.0(1950)                     | 23.6(1946 census)   | .2(1950)                               |
| Guadeloupe                 |   |   |   |                                | 21-27°  |  |
| Jamaica                    | 76.1% of population 10 years of age and over able to read (1943 census).  | Primary schooling (8-year course) is free, but "is not compulsory except in the towns, and for various reasons, including economic conditions and lack of accommodation, is not strictly enforced anywhere".                                    | 13.1(1943)  | 14.8(1950)                     | 22.7(1949<br>estimate)  | .5(1950)                               |
| Martinique                 | •••   |   |   | 15.2(1946) b                   |   | •••                                    |
| Netherlands West<br>Indies |   | Free, not compulsory  |   | 19.0(1949)                     | 21-27°  | .1(1949)                               |
| Puerto Rico                |   | The 6-year primary course (ages 8-14) is compulsory.  | 14.5(1937)  | 14.4(1949-<br>50) <sup>d</sup> | 26.8(1950 census)   | 5.2(1949-50)                           |
| Surinam                    |   | Schooling is compulsory for 5 years (ages 7–12).  | 12.9(1937)  | 15.6(1949)                     | 2127•   | •••                                    |
| Trinidad and Tobago.       | 77.5% of population 10 years of age and over able to read (1946 census).  | Schooling is compulsory for 6 years for children (ages 6-12) living within 2 miles of a government or government-assisted school.   |   | 18.7(1949)                     | 23.2(1950<br>estimate)  | .9(1949)                               |
| Windward Islands           | 71.1% of population 10 years of age and over able to read (1946 census).  | Schooling is compulsory between ages of 5 and 15 in Dominica, 5 and 14 in Grenada, 6 and 14 in St. Lucia, not compulsory in St. Vincent.  |   | 19.9(1950)                     | 27.1(1946 census)   | .9(1950)                               |

<sup>&</sup>quot;In several provinces it may be curtailed or prolonged by decision of the local education authorities."
Public schools only.
Estimated range; see p. 62 of text.

<sup>d Data from Facts on the School System of Puerto Rico; not including 1.0 per cent of the population enrolled in accredited private schools (primary and secondary).
e Estimated range; see p. 62 of text.</sup> 

#### **OCEANIA**

|                            | I Literacy (percentage, criteria, and source of data)                              | II Compulsory schooling (period and estimated effectiveness); duration of complete primary course  | III Primary school enrolment (percentage of total population) |                      | IV  Percentage of total   | V<br>Post-primary<br>school<br>enrolment |
|----------------------------|--|--|---|----------------------|---|--|
|                            |  |  | Earlier<br>year   | Latest year<br>known | <ul> <li>population</li> <li>in 5-14 year</li> <li>age-group</li> </ul> | (percentage<br>of total<br>population)   |
| Australia                  | Over 95% of adult population believed to be literate.                              | Schooling is compulsory for 8-10 years in different states; the primary course takes 6 to 8 years. | 14.9(1937)  | 13.1(1948)           | 15.1(1947<br>census)  |  |
| New Zealand                | Over 95% of adult population believed to be literate.                              | The 8-year primary course is compulsory (ages 7-15).   | 15.2(1937)  | 14.9(1949)           | 16.5(1949)  | 3.5(1948)                                |
| Fiji                       | 64.4% of population 15 years of age and over able to read and write (1946 census). | Not compulsory.  | 14.1(1938)  | 17.3(1950)           | 27.1(1949 estimate)   | .8(1950)                                 |
| Hawaii                     | 84.9% of population 10 years of age and over able to read (1930 census).           | The primary course is 6 years; schooling is compulsory for 10 years (ages 6-16).                   |   | 12.4(1950)           | 18.8(1950<br>census)  | 9.7(1950)                                |
| Netherlands<br>New Guinea  |  | Not compulsory.  |   | 2.8(1950)b           | 21-27°  |  |
| New Guinea<br>(Aust. T.T.) |  | Not compulsory.  |   | 8.8(1949-50) d       | 21-27°  | .01(1949)                                |
| Papua                      | •••  | Not compulsory.  | •••   | 11.1(1950)d          | 21-27°  | .2(1950)                                 |

 <sup>16.0</sup> for non-Maoris, 27.2 for Maoris in 1949 (estimate).
 Including "civilizing schools" teaching largely agriculture,
 Malay, flute-playing, and religion and in which reading, writing

and arithmetic are "treated as of secondary importance".

• Estimated range; see p. 62 of text.

d Including mission schools.

### UNION OF SOVIET SOCIALIST REPUBLICS

|        |   |  |   |                      |                                   | •  |
|--------|---|--|---|----------------------|-----------------------------------|--|
| -      | I Literacy (percentage, criteria, and source of data)   | II Compulsory schooling (period and estimated effectiveness); duration of complete primary course  | III Primary school enrolment (percentage of total population) |                      | IV Percentage of total            | V<br>Post-primary<br>school<br>enrolment |
|        |   |  | Earlier<br>year   | Latest year<br>known | population in 5-14 year age-group | (percentage<br>of total<br>population)   |
| USSR • | 81.2% of population 9 years of age and over literate; percentages in the separate republics range from 85.3 in the Ukraine to 67.2 in Turkmenistan (1939 census; criteria not known). | 8 years of schooling (ages 7-15) are compulsory, but the provision is "universally enforced only for ages 7 or 8-12. From 12 to 15 years about one-third of children, almost exclusively those in rural districts, remain outside the school". |   | 16.7(1947–<br>48)°   | 24-26 <sup>d</sup>                | •<br>                                    |

<sup>•</sup> Source: UNESCO: World Handbook of Educational Organization and Statistics.

• Enrolment in "general primary and secondary schools" (classes 1-10), inclusive. See footnote •.

• Population estimate for 1946.

• Estimated range; 17.6 per cent were in the age-group 7-14 in 1939 (census).

<sup>• 0.9</sup> per cent of the population were enrolled in technicums and higher institutes in 1939-40; 0.6 per cent were enrolled in technicums in 1947-48. Since secondary enrolment consists of the higher grades of unified primary-secondary schools, data do not permit a separation into primary and post-primary enrolment percentages comparable to those presented for other countries.

# Chapter VII<sup>1</sup>

# CONDITIONS OF WORK AND EMPLOYMENT

#### Introduction

The social situation today cannot be seen in perspective unless some attention is paid to the activities whereby the peoples of the world obtain, in the first place, the essentials of life and, in the second place, achieve more or less high standards of living. The main fields of human work may be briefly listed as agriculture, or the production of food; industry, or the production of other goods; commerce, or the distribution of goods; and, finally, the rendering of services.

Agriculture is still the greatest employer of mankind, but industry, usually accompanied by more intensive methods of agriculture and lower employment in that branch is, in an increasing number of areas, already challenging its position. From the point of view of conditions of employment, it is true that large-scale commercialized agriculture is in some respects more comparable to modern industry than to subsistence farming, while primitive forms of industry involve for the workers some of the same problems as agriculture. Nevertheless, no better broad division can be found for the purposes of this chapter. There is, however, another trend in occupational distribution which will be given some attention since it is rapidly assuming the dimensions of a universal problem—namely, the increase in non-manual relative to manual workers (by "nonmanual workers" are meant not only those under contract of employment in the private sector, but also those in the public sector and those working independently).

In the United States, for example, in 1940, members of the professions and salaried employees already accounted for 31.3 per cent of the gainfully employed population, whereas the percentage in 1910 was no more than 21.1. In Sweden, salaried employees in com-

merce and offices alone accounted for 23.6 per cent of the population gainfully employed in 1945, as opposed to 11 per cent in 1920. In France, salaried employees amounted to 12.3 per cent of the population gainfully employed in 1931 and 17.9 per cent in 1946. In Switzerland, the number of salaried employees, including public employees, in 1941, was 2.17 times higher than in 1900, although the number of manual workers had increased by only 20 per cent.

Though this phenomenon is everywhere apparent, it is more marked in industrialized than in basically agricultural countries. The concentration and extension of undertakings, improvements in technique, mechanization and the scientific organization of labour, give rise to a considerable increase both in the administrative, financial, supervisory and marketing services and also in the preparation, organization, co-ordination and supervision of the processes assigned to manual workers.2 Even in the fully industrialized areas, where development in this direction is to some extent inevitable, some apprehension is beginning to be felt about a certain unbalance, while in the areas which are still in the early stages of industrialization the introduction and development of education has, in some cases, been accompanied by a marked prejudice in favour of white-collar jobs. This prejudice has undoubtedly deprived industry of many potential skilled and intelligent workers and might lead to the development of an overly heavy superstructure composed of persons in tertiary occupations.

The statistics in table I supply some general indications as to the industrial status of mankind.

 ${\it Table I^*}$  percentage distribution of the economically active population by status

| Country                        | Date of<br>latest<br>available<br>census | Employers<br>and workers<br>on own<br>account | Salaried<br>employees<br>and wage-<br>earners | Unpaid<br>family<br>workers | Others | Total           |                                      |
|--------------------------------|--|---|---|-----------------------------|--------|-----------------|--------------------------------------|
|                                |  |   |   |                             |        | Percent-<br>age | Economically<br>active<br>population |
| Africa                         |  |   |   |                             |        |                 |                                      |
| Egypt                          | 1947*                                    | 35.9  | 40.9  | 20.3                        | 2.9    | 100.0           | 6,728,659                            |
| Southern Rhodesia <sup>b</sup> | 1946                                     | 17.3  | 82.7  |                             |        | 100.0           | 33,245                               |
| America                        |  |   |   |                             |        |                 |                                      |
| Canada                         | 1951                                     | 21.2  | 72.5  | 6.3                         | _      | 100.0           | 5,247,000                            |
| United States                  | 1950                                     | 16.1  | 81.8  | 2.1                         | _      | 100.0           | 59,583,000                           |
| Chile                          | 1940                                     | 25.4  | 74.6  |                             |        | 100.0           | 1.741.526                            |
| Colombia                       | 1938                                     | 30.8  | 35.1  | 30.0                        | 4.1    | 100.0           | 4,566,150                            |
| Cuba                           | 1943                                     | 43.2  | 31.5  | _                           | 25.3   | 100.0           | 1,520,851                            |
| Jamaica                        | 1943                                     | 34.5  | 65.5  | _                           |        | 100.0           | 505,092                              |
| Mexico                         | 1940                                     | 21.6  | 52.3  | 3.6                         | 22.5   | 100.0           | 5.858.116                            |
| Peru                           | 1940                                     | 43.9  | 41.6  | 13.6                        | 0.9    | 100.0           | 2,475,339                            |
| Puerto Rico                    | 1940                                     | 20.9  | 61.2  | 3.0                         | 14.9   | 100.0           | 601.990                              |
| Venezuela                      | 1941                                     | 36.9  | 59.2  |                             | 3.9    | 100.0           | 1,240,682                            |

<sup>&</sup>lt;sup>1</sup> Prepared by the International Labour Office.

<sup>&</sup>lt;sup>2</sup> ILO, General Report to Advisory Committee on Salaried Employees and Professional Workers, second session, Geneva; 1052

Table In (cont'd) PERCENTAGE DISTRIBUTION OF THE ECONOMICALLY ACTIVE POPULATION BY STATUS

|                             | Date of                       | Employers                        | Salaried                          |                             |            | Total           |                                      |
|-----------------------------|-------------------------------|----------------------------------|-----------------------------------|-----------------------------|------------|-----------------|--------------------------------------|
| Country                     | latest<br>available<br>census | and workers<br>on own<br>account | employees<br>and wage-<br>earners | Unpaid<br>family<br>workers | Others     | Percent-<br>age | Economically<br>active<br>population |
| Asia                        |                               |                                  |                                   |                             |            |                 |                                      |
| Cyprus                      | 1946                          | 42.1                             | 57.9                              | _                           | _          | 100.0           | 165,422                              |
| Japan                       | 1950                          | 26.1                             | 39.1                              | 34.6                        | 0.2        | 100.0           | 35,540,000                           |
| Philippines                 | 1948                          | 29.8                             | 40.3                              | 22.1                        | 7.8        | 100.0           | 7,415,776                            |
| Singapore                   | 1947                          | 16.1                             | 49.5                              | 34.2                        | 0.2        | 100.0           | 534,877                              |
| Europe                      |                               |                                  |                                   |                             |            |                 |                                      |
| Austria                     | 1951                          | 17.5                             | 64.3                              | 18.2                        |            | 100.0           | 3,352,300                            |
| Belgium                     | 1947                          | 22.2                             | 71.4                              | 6.4                         | _          | 100.0           | 3,481,027                            |
| Bulgaria                    | 1934                          | 28.4                             | 16.9                              | 54.7                        | _          | 100.0           | 3,433,103                            |
| Czechoslovakia              | 1947                          | 19.2                             | 60.7                              | 20.1                        | _          | 100.0           | 5,852,372                            |
| Denmark <sup>e</sup>        | 1951                          | 21.0                             | 72.4                              | 6.6                         | _          | 100.0           | 2,173,000                            |
| Finland                     | 1940                          | 26.0                             | 41.5                              | 32.5                        | _          | 100.0           | 2.017,248                            |
| France                      | 1946                          | 34.7                             | 65.3                              | —                           | _          | 100.0           | 20,520,466                           |
| Germany:                    | 1740                          | 54.7                             | 03.5                              |                             |            | 100.0           | 20,020,                              |
| Federal Republic            | 1950*                         | 15.4                             | 71.6                              | 13.0                        |            | 100.0           | 21,693,000                           |
| Democratic Republic         | 1946                          | 15.5                             | 71.7                              | 12.8                        | _          | 100.0           | 8,139,574                            |
| Berlin                      | 1946                          | 11.9                             | 85.6                              | 2.5                         |            | 100.0           | 1,606,871                            |
| Iceland                     | 1940                          | 19.7                             | 78.3                              | <u> </u>                    | 2.0        | 100.0           | 53,570                               |
| Ireland                     | 1946                          | 26.7                             | 51.4                              | 16.5                        | 5.4        | 100.0           | 1.298.367                            |
| Ttoby                       | 1940                          | 26.1                             | 50.4                              | 21.3                        | 2.2        | 100.0           | 18,754,746                           |
| Italy                       | 1930                          | 19.3                             | 62.6                              | 17.5                        | 0.6        | 100.0           | 135,139                              |
| Luxembourg                  | 1947                          | 18.6                             | 68.4                              | 10.5                        | 2.5        | 100.0           | 3.866,445                            |
|                             | 1947                          | 26.1                             | 68.3                              | 5.6                         | 2.5        | 100.0           | 1,383,316                            |
| Norway                      | 1940                          | 30.2                             | 32.5                              | 34.5                        | 2.8        | 100.0           | 15.006.092                           |
| Poland                      |                               | 20.6                             | 52.5<br>51.3                      | 34.3<br>6.6                 | 21.5       | 100.0           | 3.049.856                            |
| Portugal                    | 1940                          | 20.6<br>32.0                     |                                   |                             | 9.4        | 100.0           | 10,457,601                           |
| Romania                     | 1930                          |                                  | 14.2                              | 44.4                        | 9.4<br>4.3 | 100.0           | 300.477                              |
| Saar                        | 1946                          | 14.2                             | 74.1                              | 7.4                         |            | 100.0           | 2.987.890                            |
| Sweden                      | 1945                          | 20.2                             | 74.9                              | 4.9                         |            |                 | 1,992,487                            |
| Switzerland                 | 1941                          | 21.1                             | 69.9                              | 7.6                         | 1.4        | 100.0           |                                      |
| United Kingdom <sup>d</sup> | 1951*                         | 7.0                              | 90.8                              | 0.2                         | 2.0        | 100.0           | 22,578,500                           |
| Yugoslavia*                 | 1948                          | 77.2                             | 22.1                              | _                           | 0.7        | 100.0           | 9,509,020                            |
| Oceania                     |                               |                                  |                                   |                             |            |                 |                                      |
| Australia                   | 1947                          | 19.0                             | 76.6                              | 0.9                         | 3.5        | 100.0           | 3,196,431                            |
| Hawaii                      | 1950                          | 11.1                             | 87.1                              | 1.8                         | -          | 100.0           | 166,300                              |
| New Zealand                 | 1945                          | 16.8                             | 68.3                              | 0.8                         | 14.1       | 100.0           | 679,465                              |

<sup>\*</sup> This table is derived from table II, pp. 8-29, of Year Book of Labour Statistics, 1949-50, ILO, Geneva, 1951, except in a few cases where more recent data have become available. Reference should be made to pp. 33-35 of this Year Book for explanatory notes.

<sup>c</sup> Data are based on a labour force sample survey of May

1951.

d Data are based on a 1 per cent sample and exclude Northern Ireland.
• Wage-earners only.

With these basic facts in mind it is possible to proceed to a brief examination of the conditions of employment and work in the main occupational fields, namely agriculture and industry, the latter being taken in its widest sense.

It is evident, however, that the whole occupational structure of humanity is in a state of constant flux. The variations in, and evolution of, human needs, resources and achievements due to differences of physical environment, as well as accidents of history, necessarily result in many conflicting stresses and strains. Certain human groups distributed throughout the occupational fields are more prone than the bulk of humanity to suffer from the impact of these forces upon their employment—those, for example, who are forced to migrate in search of employment, those who start work whilst still children, and women workers shouldering a dual responsibility. Some consideration will, therefore, also be given to the problems of these groups.

# CONDITIONS OF WORK AND EMPLOYMENT IN AGRICULTURE

Table II ESTIMATED PROPORTION OF WORLD POPULATION IN AGRICULTURE, 1949\*

| Area                          | Total<br>population<br>(in millions) | Agricultural<br>population<br>(in millions) | Agricultural<br>population as<br>a percentage<br>of total |
|-------------------------------|--------------------------------------|---|---|
| Northern America <sup>b</sup> | 163                                  | 33  | 20  |
| Europe                        |                                      | 129   | 33  |
| Oceania                       |                                      | 4   | 33  |
| South America                 |                                      | 64  | 60  |
| Central America <sup>c</sup>  |                                      | 33  | 67  |
| Asia                          |                                      | 878   | 70  |
| Africa                        |                                      | 146   | 74  |

Source: FAO, Yearbook of Food and Agriculture, 1950, p. 15.

<sup>c</sup> Including Mexico.

European population only.

<sup>&</sup>lt;sup>a</sup> All figures exclude the postwar area of the USSR. <sup>b</sup> Canada and the United States.

About three-fifths of the world's population obtain their livelihood from agriculture. The estimates presented in table II show that in South and Central America, Asia and Africa, upwards of 60 per cent of the population is in agriculture; in individual countries the figure runs as high as 80 per cent. This fact has an important bearing on conditions of work and employment in agriculture, in view of the inverse relationship which exists between this proportion and national income per capita. Industrialized countries with improved agricultural techniques can produce, with relatively few people on the land, as much food as it is necessary for them to obtain by home production. These countries have reached a stage of development which permits the release of workers from agriculture to other productive occupations. It must be borne in mind, however, that most of the world's agricultural population is living in economically underdeveloped areas and that the peoples of the underdeveloped areas are in the main agricultural workers.

In many countries the area of arable or cultivated land is low in relation to the total population and where, as in the underdeveloped areas, a high proportion of the active population is in agriculture, the average size of farms is too small for economic operation. The fact that the area of arable land per inhabitant is extremely low in the United Kingdom means neither that the average farm is too small nor that the agricultural population is necessarily poverty stricken, since only about 5 to 6 per cent of the inhabitants are engaged in agriculture. On the other hand, the fact that the cultivated area per head of population may be very low in the less industrialized countries implies very grave pressure of population on the land. The existence of some very large estates, employing, in relation to their area, fewer people than the smaller farms, contributes still further to this pressure.

In the absence of land and water development schemes in some countries, population has a tendency to be concentrated in a few areas where there are natural factors favourable to agricultural production. The slowness of opening new areas to cultivation in the face of population growth creates a strong tendency to parcelization and fragmentation of the agricultural units, thus resulting in the minute farm which is such a significant characteristic of farming in Asia. The tendency to parcelization operates through poverty, debt, systems of inheritance and lack of security.

While, theoretically, the use of modern techniques of intensive cultivation would make it possible to obtain an adequate livelihood from even a very small holding, in practice, the introduction of these techniques requires capital beyond the reach of the smallholder in the economically underdeveloped areas, so that the combination of small farms and backward techniques keeps the agricultural populations poor.

#### Land tenure and its effects on labour

Agricultural workers may be broadly grouped as follows:

- (a) Independent farmers owning the land they cultivate;
  - (b) Cash tenants, share-croppers and similar groups;

(c) Hired workers, who may be divided into those who work for wages and those whose remuneration is in terms of produce, an area of land to cultivate, etc.

It should, however, be noted that these groups are not necessarily mutually exclusive nor are they by any means clearly defined. The first group (a) ranges from the landed proprietor, exploiting vast areas with the help of hired labour, to the smallholder with so little land and such poor equipment that he is worse off materially than many landless labourers. In between, and very important numerically, stand the ownerfarmers, typical of Western Europe and Northern America who, even if they employ little labour beyond that of their family, enjoy some degree of prosperity above the level of bare subsistence. Standing somewhat apart in this group are those farmers who own-or simply farm-their land co-operatively. The second group (b) covers many forms of tenancy and of sharecropping, the tenant or share-cropper enjoying a varying degree of independence. The group of hired workers (c) is probably not so important numerically in agriculture as in other branches of economic activity, but statistically its measurement presents difficulties in view of the inclusion or non-inclusion of unpaid family workers and workers whose payment is in kind.

The three groups exist in all countries and areas, although their relative importance varies. China had, in 1946, some 70 million farmers, of whom 40 per cent worked only their own land, 35 per cent were tenants, while the remaining 25 per cent farmed their own and other people's land. At the same time the proportion of hired labourers in relation to agricultural population was quite low, although the number of permanent wage earners exceeded 10 million and millions more hired out their labour by the day. In India, the proportion of hired labour is greater, representing one-third of the total working population and it is known to be increasing. In the United States, on the other hand, half the farms employ no non-family labour.

While the owner's material circumstances depend on the extent of his holding, its productivity and, in some cases, his indebtedness, the tenant's circumstances are in large measure affected by the conditions of his tenancy. In the more advanced agricultural areas, such as the United Kingdom, the cash renter, whose contract fixes the rent and may make reference to sound management practices, enjoys a status and prosperity comparable to that of the owner-operator in the same area.

### Types and forms of income

Returns in agriculture are uncertain for many reasons. In subsistence agriculture, which is still the prevalent form in underdeveloped areas, a very high proportion of income is, of course, represented by the produce consumed on the farm, only a small amount of surplus production being used in exchange for those items which the farm does not produce. In commercial agriculture, where crops and livestock are produced primarily for sale, and items of consumption which cannot be produced economically on the farm are bought for cash or procured through exchange, the more widespread division of labour characteristic of a

developed economy has meant that the amount of food, feed, fuel, clothing, etc., produced on the farm and the amount of processing and servicing done there has become less and less, so that a highly specialized farm of today may produce nothing at all for the consumption of its occupants, who are thus as dependent on their cash income as any industrial workers.

In short, income in agriculture assumes very different forms. Income is also generally lower than in other occupations, owing to the prevalence of small units; disproportionate use of labour in relation to land and, particularly, to capital; low levels of management, and a whole array of institutional factors hindering rational operation. This is true even of the more advanced countries. Only in a few cases, such as Australia and New Zealand, does the level of wages in agriculture approach that in industry. Comparisons between wages in rural and urban occupations do, of course, present difficulties, since in agriculture it is common to pay a share of the wages in kind, in such forms as housing or meals. Frequently, agricultural workers have the use of a small plot of land, are entitled to a certain amount of fuel gathered on the employer's land, etc., and it is difficult to place an accurate value on such perquisites. More difficult still is an estimation of the relative advantages and disadvantages of rural life. While it is frequently claimed that work in agriculture is necessarily healthier and more satisfying, it is true even in the most advanced countries that the rural areas do not have as high a standard as urban areas with respect to educational, health and recreational facilities. Differences in the cost of living between rural and urban areas are also difficult to measure. An appraisal of the difference in real wages, especially for valid international comparison, is, therefore, not practicable here.

The prevalence of low wages in agriculture has led a growing number of countries to resort to minimumwage fixing.3 Most European countries now have minimum-wage regulations and such countries as Argentina, Burma, Guatemala, India, Venezuela and several British territories have provisions for fixing minimum wages in agriculture. The machinery used varies. In some countries it takes the form of a legislative decree establishing a minimum wage; in others, the national authority has established wage boards which have the responsibility of making the necessary inquiries and fixing the rates. Where an effective tradeunion movement among agricultural workers has developed, collective bargaining or worker participation in the determination of wage rates has often been used. Finally, in certain countries (e.g., Australia and New Zealand) a system of arbitral awards is employed for regulating wages and employment conditions in agriculture as in industry.4

In view of the low levels of income prevailing, the exceedingly high rate of indebtedness among agricultural families in the underdeveloped areas is not surprising. There is, in fact, urgent need in most underdeveloped countries for adequate credit in rural areas—

<sup>8</sup> Minimum-Wage Fixing Machinery in Agriculture, Report VII to 33rd Session, International Labour Conference, 1950.

credit for reasonable periods of time and at reasonable rates of interest—if there is to be any improvement in agricultural techniques, for few farmers can afford the small amount of cash necessary for improved seeds or even for simple implements. The agricultural worker, finding that his income does not cover his immediate needs, usually has no alternative but to turn for credit to a professional moneylender, to whom he pays usurious rates of interest in spite of anti-usury laws in most countries. The moneylender is frequently at the same time the only agent through whom the cultivator can market his produce or buy the items he needs. It should also be noted that indebtedness frequently results from expenditure for such unproductive purposes as wedding or other feasts. Students of Asia cite numerous instances of farm families being tied to moneylenders for life with no prospects of ever getting clear of debt. In the process they lose their land and what few belongings they possess, and thus provide a constant stream of recruits to join the swelling ranks of the landless workers. Moreover, elimination of creditors or credit may give only temporary relief.

Government subsidies of rural credit and promotion of co-operatives have been recognized as remedies in most of these countries. Particular attention is being given to the possibility of creating co-operative credit institutions (which, in addition to acting as lending agencies, could be used as a means of promoting joint undertakings and could serve as a centre for the promotion of improved methods). The effectiveness of governmental or co-operative credit facilities has been limited by the inadequacy of resources. Nevertheless, great faith is placed, in Asia and in Latin America, on co-operative organization as a means of improving the standard of living of the working populations through the development of institutions based on self-help, thrift and mutual aid, and also as a useful channel through which official economic and social policies can be conveyed to the many small dispersed units. Under this impulse the co-operative movement is branching out into many new fields in Asia, and in most of the countries concerned governments maintain special departments, sometimes ranking even as ministries, to work out and apply policies and plans in these matters and generally to promote and supervise co-operative organization. In Latin America, where co-operation also enjoys official support, special regulations have been promulgated authorizing the granting of credit to agricultural co-operative organizations as well as to individuals, through the intermediary of the State banks or agricultural co-operative credit institutions.

# Conditions of work

The regulation of working conditions in agriculture has, in general, lagged behind that in other occupations, while the characteristics of agriculture—notably, the small size of undertakings and the small number of employed workers per unit—raise fundamental difficulties in the enforcement of regulations, even where they exist. Moreover, agriculture is essentially a seasonal occupation, with very pronounced peaks of activity at

<sup>&</sup>lt;sup>4</sup> ILO, Convention concerning minimum-wage fixing machinery in agriculture, 1951, and Recommendation concerning minimum-wage fixing machinery in agriculture, 1951.

<sup>&</sup>lt;sup>5</sup> ILO. The Application and Supervision of Labour Legislation in Agriculture, Report I, Fifth Conference of American States Members of the ILO, Rio de Janeiro, 1952, published by the ILO, Geneva, 1952.

certain times of the year; there is also a very great variety in farming operations and undertakings. These factors make a great amount of flexibility a necessary feature of any acceptable regulations.

Nevertheless, in those countries where hired workers are a significant element in the agricultural labour force, there is a growing tendency to regulate-either by legislation or by collective bargaining—such questions as hours of work, holidays with pay, etc. The latter method is not as frequent perhaps in agriculture as in other occupations, owing to the weakness or complete absence of trade unionism in agriculture in many countries. Thus the State has frequently intervened in order to ensure that agricultural workers benefit as far as possible from the type of social protection afforded to other workers. In many countries this has become a part of government policy in order to stem the flow of the agricultural population to urban areas where wages and conditions of work and living are considered superior.

In the case of plantation workers the regulation of conditions of employment has a special importance. Plantations are frequently located in rather isolated regions and it has been necessary to establish within the plantation itself a whole range of social amenities and services. Also, workers are generally recruited from distant areas, even from other countries. Employers in many cases have had to assume responsibility for these operations and for the provision of the necessary services—since there was frequently no other authority to do so—setting reasonably adequate standards in this respect in order to assure themselves of an adequate labour force.

Hours of work may be cited as an example of the approach used in regulating employment conditions in agriculture. The problem here is to set a reasonable limit to normal working hours, while giving the regulations sufficient flexibility to permit extra hours during peak seasons. In the past it has all too frequently been the practice for agricultural workers to work from sun-up to sun-down, which, during the summer, meant a very long working day. In some countries flexibility has been achieved by fixing slightly different limits for different seasons of the year, as in Sweden; in other countries an annual total maximum is set, together with weekly limits to normal hours, as in France. In addition to setting normal hours, the regulations also provide for a limit to the amount of overtime which a worker may be required to put in. There is a definite trend to introduce in agriculture eight hours as an average working day taken over the whole year; due to the factors just mentioned, however, it should be clear that in actual fact the working day is frequently considerably longer.

# Security and regularity of employment

Independent farmers, tenants and hired labourers each face problems with respect to security of employment. Independent farm operators are subject to the economic ups and downs of other entrepreneurs, accentuated by the extreme fluctuations in the prices of agricultural products. It is well known that even in the developed areas agriculture is still subject to a number of natural hazards. Such hazards assume serious pro-

portions in many of the less-developed areas as a result not only of natural conditions but also of more primitive methods of coping with them. Droughts are common in the Middle East, Africa, Eastern Europe and the Far East; floods are perhaps even worse threats to crops, animals and properties in the Far East. About 250 million people, or about 22 per cent of the entire population of the ECAFE region, live under the protection of dykes with a total length of over 20,000 kilometres. On a conservative estimate about 90,000 square miles are still subject to annual flooding due to dyke breaches or other causes, inflicting upon 17 million people total annual damage in the neighbourhood of \$US 200 million.6 In China, the famous Yellow River made fifty-one dyke breaches over a period of eightythree years from 1855 to 1938. The average area in India per annum was 2,318 square miles affecting a population of approximately 900,000. The serious flood of the Yangtze in 1931 inundated an area of 248,000 square miles affecting 2,527,700 families. Another flood of the same river in 1935 did about half the damage of 1931. A serious flood of the Pearl River in 1947 inundated 529,400 hectares affecting approximately 4,230,000 of the population. The Ganges, the Indus, the Mekong River of Indochina and the Me-Nam Chao Phya of Thailand are also notorious for their destructive capacity.7

Improper cropping, primitive methods of cultivation, deforestation and scanty utilization of fertilizers hasten the depletion of soil fertility and accelerate soil erosion. In Africa, especially in the tropical region, shifting cultivation has been the rule-of-thumb method to maintain fertility. When land is getting more scarce, insecurity increases with the difficulty of further shifting.

Disease is a major problem of insecurity in itself and its effect on income security is obvious. Both animal and plant diseases tend to spread with the opening up of transportation. In developed countries, such foreign influence is minimized by quarantine, fast reporting and immediate remedial measures.<sup>8</sup> In less-developed countries, the occurrence of a hitherto unknown disease finds its victims almost totally defenceless.

Tenants and persons in similar categories often suffer from the insecurity of their tenure. Throughout the world there is evidence of an increasing tendency to legislate on tenancy, most legislation tending to give greater security by longer leases and compensation for improvements. Share-cropping arrangements in many parts of the world gave the cultivator a very insecure level of living. Many countries—France, for example—are now giving the cropper a greater degree of security by adjusting legislation in such a way as to provide him with greater management responsibility and a larger share of returns, thus bringing him nearer to the status of an independent tenant. Hired workers in agriculture,

<sup>8</sup> Work of FAO, 1949/50, Food and Agriculture Organization of the United Nations, 1950, pp. 22-38.

<sup>&</sup>lt;sup>6</sup> Annual Report of the Bureau for Flood Control, September 1949—December 1950, United Nations document E/CN.11/263, pp. 6-8.

pp. 6-8.

<sup>7</sup> For details and measures of flood control see Flood Damage and Flood Control Activities in Asia and the Far East, Flood Control Series No. 1, prepared by the Bureau of Flood Control, Economic Commission for Asia and the Far East, Bangkok, October 1950.

particularly in the less-developed areas, often do not benefit from regular contracts of employment and are thus subject to summary dismissal. Also, in undertakings producing commodities which are sold on the world market, and for which demand is apt to fluctuate very widely—such as most of the plantation crops in the Far East-a period of slump may throw many workers out of employment. It is ironical that a good harvest does not always represent a higher income, since the decline in prices may more than offset the increase in quantity. The reverse is, of course, also true: a bad harvest does not always imply a lower income. On the other hand, in so far as bad harvests or diseases of animals are often confined to some producers or regions, the decrease in the produce of those affected is not sufficiently compensated for by the upward effect on prices, since the total supply is only partially affected. The seriousness of the problem is intensified by lack of adequate marketing organizations and by the fact that the income of the producers is so low as to force them to sell their products at a seasonally low level and sometimes to buy back later part of their produce at a much higher price for their own consumption. The lack of storage and transportation facilities often results in good crops rotting at one place while famine conditions prevail at another.

The widening of markets on a world basis, while offsetting some of the disadvantages of a localized market, exposes the farmer and other primary producers to the fluctuations of world prices, which, it is well known, are, in the case of primary commodities, wider than in the case of manufactured articles and prices in general.9 The causes of such fluctuations often originate in business cycles or other factors in importing countries, beyond the control and comprehension of primary producers.<sup>10</sup> Restrictive measures taken by importing countries to protect domestic producers, to stimulate employment or to achieve self-sufficiency, tend to aggravate the insecurity of the primary producers, who have geared their economy to the pattern of specialization and are ill-adapted to sudden change. Moreover, in the case of some products—for example, rubber, cotton and silk—the threat of displacement by synthetic materials is ever present, despite a recent high demand for the natural products.

The seasonal aspects of agriculture have meant that its labour force includes a large number of workers who have no regular employment throughout the year. Some seasonal agricultural workers have other regular jobs in the slack season; others migrate from one part of the country to another, or even across national frontiers, as the season progresses, working at a variety of tasks and depending on only casual non-agricultural employment when there are no jobs in farming. The fact that these workers are constantly on the move and that they have no fixed residence, raises very special

9 For the first half of the twentieth century the price variof raw materials was found to be more than twice that of manufactured goods. Cf. Relation of Fluctuations in the Prices of Primary Commodities to the Ability of Underdeveloped Countries to Obtain Foreign Exchange, Report by the Secretary-General, United Nations, July 1951, pp. 12, 85.

therefore a matter of international significance, particularly for primary producers.

problems with respect to health, education, social security and the whole range of adequate living and working conditions.

In the less-developed areas, and especially in overpopulated countries where the scale of agricultural operation is small and farming techniques are primitive, there is a serious problem of underemployment. Attention is being given to this problem in many countries by the national authorities, and under the Expanded Programme for Technical Assistance, efforts are being made to find alternative and supplementary occupations for the workers concerned through the expansion or creation of rural industries and handicrafts and through the opening up of new lands for agricultural settlement.

#### INDUSTRIAL LABOUR

For the purposes of this report, industry will be taken to cover "(a) mines, quarries and other works for the extraction of minerals from the earth; (b) undertakings in which articles are manufactured, altered, cleaned, repaired, ornamented, finished, adapted for sale, broken up or demolished, or in which materials are transformed including undertakings engaged in shipbuilding or in the generation, transformation or transmission of electricity or motive power of any kind; (c) undertakings engaged in building and civil engineering work including constructional repair, maintenance, alteration and demolition work; and (d) undertakings engaged in transport of passengers or goods by road or rail including the handling of goods at docks, quays, wharves, warehouses or airports".11

Each of these branches in turn covers undertakings ranging in size and stage of development—from the small workshop of traditional industry to the vast modern factory, from the primitive quarry to the highly mechanized mine, from the erection of mud huts and footbridges to that of power stations or skyscrapers, from the operation of a rowboat to that of an airliner. The consequent variety in the conditions of workers, even within one branch of industry, is evident from a comparison of their wages in a few different countries. For example an average miner in 1949 was earning about \$13.50 a day in the U.S.A., \$0.68 in Peru, \$1.04 in Japan, \$2.70 in France, \$6.30 in the U.K., 12 and these variations in wage rates could be paralleled within individual countries.

It must be borne in mind, therefore, that although the large factory or its equivalent may be thought typical of present-day civilization, development has not been uniform and the major part of the non-agricultural workers in the world today are not, in fact, in undertakings of this type. In the most highly populated continent, Asia, for example, the major portion of industrial output is still produced by handicraft industries scattered in numerous households and small workshops, both rural and urban. Modern industries or industries using power-driven machinery and large-scale methods of production represent as yet only a small proportion of total industrial employment and output, although their development, at least in some areas, has been accele-

<sup>11</sup> ILO Convention (No. 90): Night Work of Young Persons (Industry) (revised 1948)

<sup>12</sup> In view of devaluations during the course of 1949 these figures are to be taken as only generally indicative.

rated by the stimulus of the Second World War. An estimate of the number of handicraft workers in China in 1933 was 10 millions and the number of factory workers one million. Of the total manufacturing net output, 78 per cent was produced by handicraft workers and only 22 per cent by factory workers. It has been estimated, on the basis of the census figures of 1931, that there were in India at that time some 6,141,000 persons engaged in cottage industries, 1,482,000 workers in large-scale industries and 228,000 workers in small-scale industries. Although figures for the total number of factory and non-factory workers in Burma are not available, it was estimated in 1947 that there were approximately 45,000 handicraft workers engaged in full-time spinning and weaving compared with only about 7,000 workers employed in textile factories. The number of handicraft workers in Indochina in 1936 has been estimated at about 7 per cent of the population in Tonkin and Annam and 4 per cent in other parts of the country-or about one million persons altogether—as compared with not more than 120,000 workers in modern industries, including manufacturing and mining. According to estimates made in Indonesia in the 1930's, workers engaged in manufacturing industries numbered about 2,800,000 of whom 2,500,000 worked in small-scale industries and only 300,000 were employed in large-scale machine industries. Of the total number of workers in smallscale industries, 20 per cent worked in hand-operation workshops with less than fifty workers. Of a total of about 610,000 persons engaged in manufacturing industries in the Philippines in 1939, at least 360,000 persons worked in small-scale or household industries.13 In 1950, Japan, the most industrialized country of Asia, had about 18 million people in non-agricultural occupations, of which factory employment accounted for only about 4,600,000, out of a total employed population estimated at some 37 million.14 In Latin America also, small-scale establishments predominate. The average number of workers employed per industrial undertaking is only thirteen in Argentina, ten in Brazil, twenty-nine in Chile, fifteen in Colombia, twenty in Mexico and nine in Uruguay, as compared with thirty-two in Canada and forty-three in the United States. Large undertakings are few in number. Thus, in Argentina, in 1941, there were only 486 industrial establishments employing more than 200 workers and only fifty-six with over 1,000. In Colombia, out of 7,853 establishments reported in 1945, only 156 employed over 100 workers, fifty-six over 200 and four over 1,000.

It would be erroneous, however, to assume that the small undertaking is typical only of areas economically underdeveloped and belongs necessarily to a stage of evolution which must automatically be outgrown, for this type of organization persists into eras of full development, given certain conditions. The most striking example of a prosperous country with a strong artisan tradition is Switzerland. The fact that an undertaking is small or even primitive does not necessarily

14 Ministerial Secretariat of Ministry of Labour, Monthly Labour Statistics and Research Bulletin.

mean that the workers' conditions are poor, so long as the margin of profit allows of an income sufficient to meet the recognized needs of the worker. Indeed, even scanty wages may be offset, from the social point of view, by such advantages as slower tempo or the possibility of combining the work with some other occupation such as agriculture, or, in the case of a woman, looking after a household. Bad conditions for the workers can be directly attributed to the small size of the undertaking only when the small industries are called on to compete with large-scale industry producing more cheaply. Although they still provide the major part of industrial employment in Asian countries and Latin America,15 the traditional handicraft industries, both rural and urban, have even there been declining steadily as a result of competition from modern factories at home and abroad. This decline has created a most serious problem of social and economic readjustment with which the countries concerned have now been struggling for many decades. Some handicraft industries have been forced out of existence almost entirely and others have had to curtail their output and employment and have kept their prices down only by underpaying their workers. The wages of these handicraft workers are kept very low by the constant influx of labour from the villages. In some cases modern factory industries compete with handicraft industries for the supply of raw materials. For instance, in India the village handicraft tanners are no longer able to secure the best quality hides as most of these are either exported to meet the increasing demand of modern tanning factories abroad or else are bought up by their powerful competitors at home for large-scale production. The problem of poor conditions in small undertakings is therefore on the whole a problem of

The survival or revival of handicraft, craftsmanship and artisan organization in modern society is usually attributable to their producing work of a quality or type which cannot be equalled in machine-made goods, and to the presence of effective demand for their produce, as in the case of Swiss watches, the laces of France and Belgium, the tweeds of Scotland and Ireland. It is interesting to note that these crafts were originally—and, in the latter cases, still are to a great extent—the subsidiary occupations by which agricultural populations supplemented their income.

transition.

In some cases the skill of handicraft workers has been exported from areas where labour is cheap to other fully industralized areas where the workers enjoy a higher standard of living. Thus, a few years ago, Chinese embroidery on Irish linen could be sold in Europe for a price barely exceeding the original cost of the linen. In some cases strict regulation of industrial homework, intended to protect the workers of one country against exploitation, has resulted in the export of the work to other areas—where there is less protection and labour is cheaper—and the subsequent reimport of the finished goods.<sup>16</sup>

1949).

16 See article "Industrial Homework", International Labour Review, vol. LVIII, no. 6, December 1948.

<sup>13</sup> The Economic Background of Social Policy Including Problems of Imustrialization, Report IV to Preparatory Asiatic Regional Conference of the International Labour Organisation, New Delhi, 1947.

<sup>&</sup>lt;sup>15</sup> Report of the Director-General, Report I to the Fourth Conference of American States Members of the International Labour Organisation, Montevideo, April 1949 (ILO, Geneva, 1949).

The smallness of undertakings does, however, aggravate certain difficulties in enforcing good conditions of work. As in agriculture, the prevalence of small undertakings has constituted an obstacle to the development of inspection services; the occasional small undertaking in an area of large undertakings tends to get overlooked by such services; and even where a deliberate effort is made to inspect them, they may, particularly if conditions are bad, manage to evade registration or notice. Nor are small undertakings well adapted to trade unionism. The employed workers, being separated, have less opportunity to crystallize individual grievances into a clearly formulated general demand for a higher standard in any particular respect. Of course, their immediate proximity to their employer or supervisor places their relation on a somewhat different and more personal plane.

Small undertakings are characterized by low capital investment and a high ratio of labour to production, so that there is, in any case, some inherent danger of long hours and unsuitable premises.

In the industrialized areas the problem of conditions of work has attracted considerable public attention. Worker's organizations, social reformers and legislators and even employers have sought to offset the undesirable effects of competition by promoting common and acceptable standards. Questions such as protection of women and youth, hours of work, holidays, safety and health, as well as wages and social security, have become live public issues, notably as workers' participation in public life has increased and their social consciousness has awakened. Economic as well as moral reasons have also contributed to the improvement of the workers' conditions. In many countries the standards adopted provide a good indication of actual practice, while in others, less developed, they merely indicate a goal as yet far from generally achieved but to which increasing importance is to be attached as the process of industrialization goes forward. In this section on industrial employment, labour standards relating to only two of the more important problems, namely, hours and wages, will be outlined. They do, however, provide some general indication as to the prevailing situation.

#### Hours

In a non-specialized subsistence economy the length of the working day is in general determined by the hours of daylight and the time needed to produce enough to meet basic needs. However, some other form of limitation is necessary in most communities today, since many are not working on their own account and are dependent for their subsistence not directly on their production but on the wage paid them by an employer.

The exact duration of the working day beyond the limits imposed by required production may simply be a matter of custom, agreement, or regulation, the latter usually intervening where it is necessary to safeguard workers against the over-long hours into which competition on the labour market might indirectly force them.

Typical of the endeavour to remove this element of competition was the adoption as early as 1919 of an international convention limiting hours of work to eight a day and forty-eight in the week in industrial

undertakings.<sup>17</sup> The same principle was extended eleven years later, by another convention, to commerce and offices.<sup>18</sup>

The present situation as regards the working day can be summarized as follows: in principle at least, by collective agreement or regulation, the eight-hour day (sometimes nine in the interests of a five-and-a-half-day week) is now very generally accepted for manual workers and is the legal or agreed standard—not exceeded, as a rule, except in certain occupations involving periods of mere attendance, light or intermittent work or in exceptional and temporary circumstances.

There are, in fact, only two countries, Afghanistan and Egypt, where a standard working day exceeding eight hours is expressly permitted under the law, but even in these cases some collective agreements embodying the eight-hour day have now been concluded. In a number of countries the hours of work are further reduced in the case of workers engaged in particularly dangerous, unhealthy or disagreeable occupations; on the other hand, the limits mentioned above are often exceeded under arrangements instituted for work which is necessarily continuous, intermittent or seasonal.

There is more diversity in the standard working week, but periods longer than forty-eight hours are now as a rule rare and forty-eight hours is, in fact, the normal standard in the majority of countries. A noteworthy recent development has been the adoption of this forty-eight-hour standard by several Far Eastern countries, India, Pakistan, Japan, etc., and by most of the countries of the Near and Middle East.

Statutory regulations applying to industrial undertakings in general fix a maximum week of forty-seven hours in Finland; forty-six in Poland and the Union of South Africa; forty-five hours in Panama; forty-four in Burma, the Canadian provinces of British Columbia and Saskatchewan, and in Cuba and Ecuador. In the United Kingdom the prevailing hours of work in industry, as determined by collective agreement, are from forty-four to forty-five hours. The forty-hour week is actually applied in a general manner in only three countries—Australia, New Zealand and the United States. In France the forty-hour system adopted in the 1930's is still retained in principle, but a special overtime system is permitted, resulting in an effective working period of more than forty hours. Periods of less than forty hours, apart from special cases or activities, scarcely exist except in a relatively few industries or undertakings, particularly in the United States.

Without affecting the actual number of hours worked, there has been a tendency in recent years to alter their distribution so as more strictly to regulate rest periods and the over-all length of the working day.

One of the basic problems of general regulation of hours of work is that of striking the optimum level which yields maximum output, so that the workers may obtain the benefit of leisure without finding their standard of living reduced in other respects through a

<sup>&</sup>lt;sup>17</sup> ILO Convention (No. 1), Hours of Work (Industry). <sup>18</sup> ILO Convention (No. 30), Hours of Work (Commerce and Offices).

decrease in the consumer goods and services available to them. Nor can the question of working hours be easily divorced from other social problems. Under urban conditions, leisure itself, for example, frequently constitutes a special problem. In underdeveloped areas the number of hours, weeks or months a worker can work intensively is sometimes seriously affected by his state of malnutrition.19

In the last ten years some countries have been seeking to reduce excessive hours of work; in others, such as France, Belgium and the United Kingdom, where a very low limit had already been established, overtime with compensatory pay-a formula developed to give flexibility to hours regulations while maintaining protection—has been so generally put into effect as to raise the average level.20

The effects of the general social situation and policy on hours of work must be borne in mind. In one area a decline in business may be met at first with reduced hours for the same number of workers; in others by immediate discharge of many workers and possible longer hours for those retained.

The problem of hours of work cannot be considered apart from that of paid vacations and of workless public holidays with pay. The remarkable extension of such vacations over the last few years has greatly reduced the number of days and hours of work performed by each worker during the year.

# Wages

Wages are still primarily determined by the demand for, and supply of, the particular type of labour offered, although in most countries efforts have been made to protect the lowest-paid workers (who are very often weak in bargaining power), the purpose of such protection being to secure for them wages at least adequate to meet their basic needs. Thus, many governments have adopted minimum-wage legislation to protect certain classes of workers, such as women and young persons or workers in sweated trades. Most industrialized countries have some form of minimum-wage legislation and in recent years governments of many of the lessdeveloped countries in Latin America and Asia have also introduced or extended such legislation or have raised minimum wages fixed under existing law. In fact, by 1951, some twenty-seven countries were able to ratify the ILO Convention<sup>21</sup> providing for the establishment of machinery for this purpose.

Efforts have also been made to relate wages more or less directly to the workers' basic needs: by legislating on the "vital minimum" as in France; and, more generally, by providing—in collective agreements or contracts—for the revision of wage rates on the basis of alterations in the cost of living. Fluctuations in cur-

19 Sir Grenville Orde Browne, Labour Conditions in West Africa, Colonial Office, London, H.M.S.O., 1940, p. 13; also African Labour Efficiency Survey, edited by C. H. Northcott, London, H.M.S.O., 1949.

20 Tables XII and XIII in the International Yearbook of Labour Statistics, indicate that hours actually worked in Japan and Egypt (the only Asiatic and Middle Eastern countries reporting) are still significantly longer than hours in Western

Europe, North America and Oceania.

21 ILO Convention (No. 26), Minimum Wage Fixing Ma-

chinery, 1928.

rency and cost of living in recent years have brought to the forefront this problem of wage adjustment. The workers have, on the whole, been pressing for immediate adjustments as prices rise, the governments seeking to prevent a too swift price and wage spiral and the employers endeavouring to keep their businesses on an economic footing in the face of rising labour costs combined in many cases with rising costs of raw materials. While the general rise in the cost of living in recent years<sup>22</sup> is outside the scope of this chapter, the proportionate rise of different types of wages during the course of the adjustments that have taken place is of great significance to the condition of the workers. Among the interesting tendencies that have been evidenced are a levelling upwards within industries, through relatively higher rises granted to the lowerpaid groups (including notably, in many European countries, women workers), and a swifter rise for wage earners than for salaried workers.

Perhaps more important is the ratio of the pay of unskilled labour to skilled labour, for where there is little difference this usually means that the skilled labour is in relatively good supply, a distinguishing characteristic of the developed economy. It implies, moreover, a fairly widespread possibility for the individual worker or recruit to the industry to acquire a skill and better his position. Table III illustrates the position in building construction, comparing the unskilled labourer with the carpenter as typical of the skilled building worker who is in demand in most countries.

Other skills are paid higher or lower in relation to the unskilled wage according to demand as well as to supply. Lorry drivers, for example—in Sweden, in Toronto and in New York—receive less than skilled carpenters, whereas in Valparaiso, in Rome, in Norway and in Lisbon they actually receive more, being presumably more scarce. While too wide a gap between highest and lowest wages betokens poverty, some difference in remuneration is generally considered necessary as an inducement to acquire skill. In the case of the USSR and the Eastern European countries, where as a general rule wages and conditions of work are determined by State regulations, a deliberate policy has been adopted of widening the gap between skilled and unskilled wages and between the most and the least productive workers in the interests of increased production. This policy has been implemented by a wide fanning out of the wage rates, the adoption of progressive output norms, and bonuses payable for achievement of specified targets.23 In other industrial countries, production bonuses have also been introduced but are not an integral part of the wage structure.

One of the problems regarding wages in the past has been that of securing for employed workers wages in cash rather than in kind in order to increase their independence. Rapid changes in the cost of living in recent years have in some cases made the workers in underdeveloped areas—where payment in kind was customary

<sup>&</sup>lt;sup>22</sup> International Year Book of Labour Statistics, 1949-50, table 23.

 <sup>23</sup> See, for example, in *Industry and Labour*, vol. VII, no. 4,
 15 February 1952, "Measures to increase production in Czechoslovakia's mines and metal industries".

—prefer such payment to cash wages, for which they were not always sure to obtain the same amount of goods. This phenomenon in some measure goes counter to a general tendency evidenced over a long period of years. The rapid changes in cost of living have also to some extent brought greater disadvantages to those workers who were bound by a long contract, their advantage of security in employment being offset by wages fixed in advance for a long period.

#### Table III

HOURLY RATES OF PAY OF UNSKILLED LABOUR IN BUILDING CONSTRUCTION EXPRESSED AS A PERCENTAGE OF HOURLY RATES OF CARPENTERS IN BUILDING CONSTRUCTION—OCTOBER 1951

| Place   | Percentag                                 |
|---|---|
| Belgian Congo (Leopoldville) Ethiopia (Addis Ababa) Nigeria Northern Rhodesia Sudan (major towns and government establishments).  | . 17<br>. 43<br>. 27                      |
| Alaska (Anchorage) Argentina (Buenos Aires) Barbados Bolivia (La Paz) British Guiana (Georgetown) British Honduras (Belize)   | . 87<br>. 86<br>. 47<br>. 41 <sup>a</sup> |
| Chile (Valparaiso) Canada (whole country) Jamaica Nicaragua (Managua) Peru (Lima Callao Balparios)  | . 54<br>. 61<br>. 50<br>. 71 <sup>a</sup> |
| Puerto Rico Trinidad (Port of Spain) United States (New York) Venezuela (Caracas) Burma (Rangoon)   | . 54                                      |
| China (Formosa)*  Cyprus (urban areas)  Hong Kong (whole territory)  Indonesia (whole country)*  Israel (Tel Aviv, Haifa)  Japan (whole country)*  Japan (whole country)* | . 60<br>. 64<br>. 36<br>. 46<br>. 84      |
| Pakistan (Karachi) Philippines (Manila) Syria (Damascus) Vietnam (Saigon-Cholon) Austria (Vienna)   | . 45<br>. 93<br>. 60<br>. 58              |
| Belgium (Antwerp, Brussels) Finland (Helsinki) Germany (Federal Republic) Greece (whole country) Iceland (Reykjavik)  | . 80<br>. 74<br>. 63<br>. 79              |
| Ireland (Dublin) Netherlands (4 towns) <sup>c</sup> Norway (whole country) Portugal (Lisbon) Sweden (Stockholm) Switzerland (Berne)                                       | . 85<br>. 80<br>. 95                      |
| United Kingdom (London)  Australia (Sydney) Hawaii (Honolulu) New Zealand (Wellington)  | . 80<br>. 63                              |

Source: Compiled from results of the annual October inquiry by the International Labour Office into wage rates in certain occupations. Results of this inquiry are published in the Year Book of Labour Statistics.

Earnings.

Remaining after taxes and social insurance premiums paid.

Amsterdam, Rotterdam, Utrecht, The Hague.

<sup>d</sup> October 1950.

# Security of employment

The question of wages or income security cannot be separated from security of employment. A basic wage rate ensures the specified earnings for a certain period only if the worker keeps his job for the whole period. The actual earnings may be considerably reduced by interruptions of work. These may be individual interruptions, due for example to fatigue, to sickness or to industrial accidents brought about by particularly hard, unhealthy or dangerous work; or they may be collective interruptions, resulting from stoppages due to disputes or from decreases in demand.

A job may appear safe and consequently more advantageous—particularly in countries where workers attach great importance to security—than a better-paid one that is apparently less safe. Security, however, is usually deemed a compensation for a lower wage only when it results from some guarantee of employment and not simply from favourable economic conditions in the particular branch of activity. This guarantee may be of an administrative nature and relate to security of job tenure or to the procedure of discharge; or it may be of an economic character, where work is guaranteed at a particular wage rate.

In most countries today the law of master and servant, governing individual or collective contracts, is based on the concept of a freely concluded agreement. The tacit, oral or written contracts of services current in industrial employment, normally provide as guarantees against summary dismissal a period of notice or compensatory pay in lieu of notice. However, both the length of the period and the extent to which such a guarantee can be enforced depend largely upon the general social situation and the extent to which the workers in the profession have achieved recognized status or are organized.

There have been in recent years some instances of a degree of security in employment being guaranteed by law, as in Italy where, under manpower legislation, workers could not be dismissed merely on grounds of redundancy without previous authorization; or as in the German Federal Republic, where a law adopted in 1951 prohibits "socially unjustifiable" dismissals. Parallels to the latter case can be found in provisions of social security legislation which restrict or prohibit dismissals on grounds of illness, accident or maternity.

The State has also intervened in some cases to give a measure of security to workers in employments subject to frequent or seasonal interruptions, as by the system of regularized or "wet-time" pay for building workers in Ireland, or Scandinavian schemes of alternative work for seasonally idle forestry workers.

#### Unemployment

The maintenance of full employment has come to be regarded as one of the first and biggest steps that governments can take to raise living standards. Measures to increase productivity, for instance, are of little significance when large numbers of workers are unemployed and therefore produce nothing. Similarly, efforts to ensure adequate wages and to protect the rights of organized workers are less likely to succeed in periods when, as a result of large pools of unem-

ployed workers, there is intensive competition in the employment market. Understanding and experience of the measures necessary to combat unemployment, though still imperfect, have vastly increased during the last fifteen years.

Unemployment, when it remains low, is often attributable simply to workers moving from one job to another, while the level of demand remains high. This sort of "frictional" unemployment may, where the employment service is adequately organized, result in workers being placed in jobs for which they are technically and temperamentally better suited than if they were arbitrarily and hastily assigned to new positions or were required to stay in their old jobs. The resulting improvement in efficiency, productivity and morale may, in fact, more than compensate for the social cost of some degree of frictional unemployment, particularly if the worker receives unemployment benefits while he is out of work. Since the end of the war, frictional unemployment has probably been greater than usual.

There is in almost all countries some unemployment caused by seasonal fluctuations either in consumer demand or in the conditions necessary for production. This is a particularly serious problem in underdeveloped countries; in industrialized countries the presence of industries with complementary seasonal fluctuations has brought some alleviation.

One of the most important of the other causes of unemployment since the end of the war has been the "inventory depression" consequent upon the selling out of excessively large accumulations of stocks, as in the United States in the first part of 1949. In Germany, Italy and probably in other countries also, some unemployment has been caused by inventory liquidation.

In some industrialized countries, notably Belgium, levels of employment are largely dependent on international trade. Changes in the pattern and volume of this trade have also threatened the stability of employment in countries which produce plantation products such as rubber. The United States inventory recession of 1949 probably had a greater impact on employment in some of these countries than on employment within the United States itself. In Germany, Greece, Ireland and Italy, as well as in Israel and other countries of the Middle East, the achievement of high levels of employment is recognized as requiring not only higher levels of effective demand but also increases in industrial capacity in which to employ workers. Present unemployment is to a large extent due to shortage of sufficient capital to employ effectively all of the labour force at a socially acceptable standard of living. In a more general sense, this is the problem of a large number of underdeveloped countries. In many of the latter, as has been shown, there are vast numbers of workers underemployed—that is, not carrying out the work, measured in man-hours, of which they are potentially capable-in subsistence agriculture, personal services, petty trade, etc. Whether a worker—whose services, as a consequence of capital shortage, are less than fully used—is actually counted as unemployed or underemployed depends on a variety of social and legal institutions. When family or other institutional ties are strong, workers tend to remain in underemployment in agriculture or other forms of family or group enterprise even though they produce little. Where social insurance and unemployment relief systems provide greater benefits, however, workers tend to leave conditions of underemployment and to register as unemployed. There is some evidence that this is the case in Greece and Italy. In Germany, a large influx of refugees has placed a strain on a stock of capital which suffered severe damage during the war. Large-scale movements of population are clearly the main factor behind the unemployment in Israel and the Arab States of the Middle East. They have also been of major importance in India, Pakistan, Japan and a number of other Far Eastern countries where postwar political developments have led to considerable shifts of population.

Latin-American countries are dependent to a large extent on external markets and, when export industries decline, it is difficult for the redundant workers to find new jobs, as such workers are usually specialized and accustomed to higher incomes than the general level of the country. During the last few years, however, Latin America has enjoyed circumstances which practically eliminated unemployment and which at the same time helped to diminish underemployment, for intense economic activity during the war did not diminish at its end, and almost all the countries undertook general programmes of development and industrialization which are increasing production potential and thus reducing underemployment. For the time being, unemployment is not a problem for the Latin-American countries, but their economic prosperity still depends in great measure on the demand situation in foreign markets.

In the fully-controlled State economies of Eastern Europe and the USSR, full employment is not only guaranteed by law but in fact the State, in complete control of manpower policy, is in a position to direct all those capable of working to employment according to the production targets established by the national economic plans.

As for the countries of Asia and the Far East, in the absence of comprehensive and up-to-date statistical data, it is extremely difficult to get an over-all picture of employment trends. To increase employment opportunities and to reduce underemployment is one of the stated objectives of the policy of most governments. In some countries such as Ceylon, India, Pakistan and the Philippines, where the political conditions have been sufficiently stable to allow long-term economic planning, the governments have undertaken schemes of economic development which should add considerably to the total volume of employment available in the long run. The implementation of these plans has, however, been hindered by a number of practical difficulties: for example, the need to avoid inflation through too rapid expansion, shortage of foreign exchange, delays in importing the necessary capital equipment and shortage of trained personnel. In Burma, Indochina and China, where production was, in 1950, much below the prewar level, lack of political stability and civil strife have contributed to the restriction of employment opportunities.

In the Middle East, schemes of economic development, planned during the closing years of the war, have

made slower progress than was anticipated owing again to financial and currency difficulties and to delays in obtaining the required equipment. The employment market has been further disorganized by a serious refugee problem resulting from the fighting in Palestine. These developments, coupled with the acknowledged high rate of increase in the population, have aggravated the chronic problem of the region: widespread underemployment in the rural areas and extremely restricted employment opportunities in the towns.

A statistical survey of the extent of unemployment would inevitably omit a large part of the world for which statistics are not available. However, in most of the countries so omitted, the problem of unemployment in the usual sense of the word is small. Most of them do have, however, a problem of underemployment which can be solved only by a programme of economic development. The following brief table (IV) will, however, give some idea of the general level of unemployment in the world today.

Table IV

GENERAL LEVEL OF UNEMPLOYMENT

| Country               | Source |                      | Number of persons |                        |           |           |           |  |  |  |
|-----------------------|--------|----------------------|-------------------|------------------------|-----------|-----------|-----------|--|--|--|
|                       |        | 1937                 | 1947              | 1948                   | 1949      | 1950      | 1951      |  |  |  |
| Union of South Africa | V(B)   | 4,510                | 10,266            | 12,173                 | 15,138    | 16,282    | 10,190    |  |  |  |
| Canada                | I ` ´  | 406,000°             | 98,000            | 103,000                | 137,000   | 168,000   | 107,500   |  |  |  |
| United States         | I      | 7,700,000°           | 2,142,000         | 2,064,000              | 3,395,000 | 3,142,000 | 1,879,000 |  |  |  |
| Chile                 | V(B)   | 2,315                | 3,700             | 3,203                  | 3,445     | 2,937     | 2,562     |  |  |  |
| Puerto Rico           | I      | · • •                | 76,000            | 71,000                 | 79,000    | 114,000   |           |  |  |  |
| Ceylon                | V(B)   | •••                  | 32,995            | 53,513                 | 68,358    | 68,471    | 56,845    |  |  |  |
| India                 | V(A)   | • • •                | ·                 | 224,900                | 293,043   | 314,336   | 338,402   |  |  |  |
| Japan                 | I      | 295,443°             | 370,000           | 242,000                | 378,000   | 436,000   | 386,000   |  |  |  |
| Pakistan              | V(A)   |                      | •••               | 77,983                 | 70,996    | 96,439    | 103,913   |  |  |  |
| Austria               | V(B)   | 320,961 <sup>b</sup> | 31,737            | 43,309                 | 91,238    | 124,850   | 116,243   |  |  |  |
| Belgium               | II     | 125,929              | 67,560            | 129,203                | 234,896   | 223,537   | 206,520   |  |  |  |
| Denmark               | III    | 95,630               | 51,998            | 51,644                 | 59,041    | 54,829    | 63,024    |  |  |  |
| Finland               | V(B)   | 3,695b               |                   | 3,473                  | 25,683    | 19,194    | 5,622     |  |  |  |
| France                | V(A)   | 379,994              | 45,777            | 77,803                 | 131,062   | 152,891   | 120,128   |  |  |  |
| Germany (Fed. Rep.)   | V(B)   | •••                  | 588,050°          | 591,532                | 1,229,711 | 1,579,766 | 1,432,323 |  |  |  |
| Ireland               | V(A)   | 81,760               | 55,623            | 61,203                 | 60,606    | 53,415    | 50,453    |  |  |  |
| Italy                 | V(B)   | 874,000              | 1,620,000         | 1,742,000 <sup>d</sup> | 1,672,708 | 1,614,940 | 1,721,087 |  |  |  |
| Netherlands           | V(B)   | 368,904              | 45,889            | 42,422                 | 62,335    | 79,071    | 92,778    |  |  |  |
| Norway                | V(B)   | 29,881°              | 8,514             | 9,026                  | 7,715     | 8,972     | 11,132    |  |  |  |
| Spain                 | V(B)   | · • •                | 138,771           | 117,020                | 160,056   | 166,182   | 144,238   |  |  |  |
| Sweden                | IV     | 67,351               | 24,446            | 25,747                 | 26,116    | 22,124    | 18,238    |  |  |  |
| Switzerland           | V(B)   | 57,949               | 3,473             | 2,971                  | 8,059     | 9,599     | 3,798     |  |  |  |
| United Kingdom        | V(B)   | 1,529,090            | 498,323           | 334,373                | 337,997   | 341,093   | 281,361   |  |  |  |

Sources:

- I. Labour force sample survey.
- II. Compulsory unemployment insurance sta-
- III. Trade union fund returns.
- IV. Trade union returns.
- V. Employment office statistics.

- V(A). Applicants for work registered. V(B). Unemployed registered.
- \* Official estimate.
- <sup>b</sup> Applicants for work registered.
- Average for March-December.
- d Average of nine months.

#### CONDITIONS OF MIGRANT WORKERS

In contrast to the areas toward which migrants moved a century ago, immigration areas today are those in which natural resources are most fully exploited and industrialization and development are at a high level. It is far easier for countries like the United States, Sweden or the United Kingdom to absorb large numbers of migrants than it is for underdeveloped areas such as those found in Latin America and Africa. Since the capacity for immigration in underdeveloped countries is dependent upon further economic expansion, and since little is known of the extent to which this expansion will be forthcoming, it is difficult to determine how many migrants will move in the future.

Migratory movements today present difficulties which are a product of industrialized society. The migrant worker is obviously affected in two ways:

(1) The worker who leaves his country of origin, especially after having worked for a number of years

in that country, loses any claims to benefits derived from such activities—for example, social security benefits; and

(2) The increased regulation of trades, professions and economic life usually includes special provisions for the alien worker which are generally to his disadvantage, so that it becomes increasingly difficult for him to work, own land, or practise his profession in a new State.

In the former case, an effort is being made, through bilateral and multilateral treaties, to enable the worker to have some social security benefits on the basis of reciprocity between governments. In the latter case, much remains to be done to secure for skilled workers and professional persons the right to follow their respective vocations in the new country. Obviously this presents a number of basic difficulties:

(1) The type of training for particular professions is not universal;

- (2) Language difficulties;
- (3) The desire on the part of professional and trade organizations to exclude aliens from the practice of their professions and vocations because of the fear of competition.

Several well-defined problems arise in any largescale movement of people, inter alia, those of language, education, housing and food. A typical example of the problem that arises when a migrant arrives at his destination is that of housing. Family groups, which make up the majority of migrant workers, obviously need family housing, but they are seldom in a position to buy or rent more than a minimum accommodation, or to require-before setting out and as a condition of accepting employment—that employers furnish it. For single men simpler housing suffices and many governments make provision for the reception of workers and their housing until such time as they are able to meet their own requirements. Many areas are deficient in housing for their own domestic population and hence additional workers put a further strain upon an already inadequate housing situation. One solution to this is found where the migrant is recruited in the country of emigration by an employer who must provide the necessary housing for his workers. (A notable example is that of Sweden which requires its recruiting employers to provide not only adequate housing but also furniture and other necessary household items, the cost of which is paid back by the migrant in instalments.)

The education of the young also presents a difficult problem inasmuch as little provision of educational facilities is made for the families of migrants crowded into new areas. Such facilities as are available are usually inadequate to meet the new demand and, in addition, when a linguistic problem arises they are usually ill-equipped to cope with it.

To make the living and working conditions of immigrants more satisfactory while paying due heed to the legitimate interests of the indigenous workers, organized migration must take place on the basis of the principle of equality of treatment. Many migration agreements specify that immigrant workers should be given the same conditions of work, social advantages and allowances, such as salary, hours of work, holidays and family allowances, on the same basis as the domestic worker. Under most agreements, the immigrants not only have the same rights but also the same obligations as the domestic workers with respect to taxation, normal duties, labour legislation and social insurance and assistance legislation.

In some cases "equality of treatment" means in effect that the immigrant is not obliged to obtain an employment permit as a foreigner.

Even when, on the legal and administrative plane, equality is ensured, the immigrant's situation is often difficult. This is particularly true when a worker goes from a country of higher to a country of lower standard of living, for mere equality is not enough to satisfy the worker if his previous experience has taught him a better standard. It must be noted that in addition to, or as a complement to, official action, there are in many countries voluntary organizations regularly helping the newcomer by intercession on his behalf, advice, contacts and friendship.

# Employment of women and of children Employment of children

A survey of the extent of employment of children, or premature employment, raises various difficulties. First of all, the age of "childhood" varies as between different countries; in some, from an age of about 15 or 16 years upwards, the individual is reckoned an adult; in others, up to the age of 21 he is still legally a minor, and as such is subject to certain restrictions and entitled to certain protection. Labour statistics also reflect the variety in national conceptions regarding childhood. Unfortunately, statistics are deficient in respect of youth employment in many cases, and particularly in some countries, where there is good reason to suppose child labour very prevalent, no statistics are available at all.

There are, however, other sources of information. Some deductions can be made from legislation on the age of admission to employment, where social and industrial development is such as to ensure that this legislation is reasonably well enforced.<sup>24</sup> The legislative position may be summarized as follows:

In North America, Australia and New Zealand, the minimum age of admission to industrial employment varies between 14 and 16 years and a general tendency towards the higher level—16 years—can be observed.

In the European countries the normal minimum age of admission to work in industry is in most cases 14 but there is evidence of a tendency towards the establishment of a higher level—15. The minimum age is 14 in ten countries (Austria, Belgium, Bulgaria, Denmark, France, Greece, Hungary, Ireland, Italy and Luxembourg) and 15 in eight countries (Czechoslovakia, Iceland, the Netherlands, Norway, Poland, Sweden, Switzerland and the United Kingdom). It is still 12 in Portugal.

In Latin America, the minimum age limit varies between 12 and 14 the latter level being prescribed in the majority of countries, including Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, the Dominican Republic, Ecuador, Guatemala, Panama, Peru, Salvador, Uruguay and Venezuela. In three countries, Costa Rica, Haiti and Mexico, the age is still fixed at 12 years.

In the Far East also, the minimum age of admission to work in factory employment is fixed as a rule between 12 and 14 years, the latter age being prescribed in the majority of cases, although sometimes only for a limited range of employments. The statutory minimum age is 12 years in Pakistan and 13 in Burma. It is 14 in Ceylon, China, India and the Philippines, and 15 in Afghanistan.

In the Near and Middle East, age limits below 14 are still frequent, the age being fixed at 12 in Egypt, Iran and Turkey, at 13 in Lebanon and 14 in Israel. In some of these countries, there are, however, minimum ages under 12 years for admission to specified categories of

<sup>&</sup>lt;sup>24</sup> ILO Convention (No. 5), Minimum Age (Industry), 1919, fixes the age at 14 and the revised Convention (No. 59), 1937, at 15; Convention (No. 10), Minimum Age (Agriculture), 1921, fixes the age at 14; Convention (No. 7), Minimum Age (Sea), 1920, fixes the age at 14, and the revised Convention (No. 58), 1936, at 15.

industrial work: for instance, in Lebanon, children from the age of 8 can be legally engaged in all industrial occupations except mechanical and unhealthy work; in Egypt, children from the age of 9 can be legally employed in certain textile mills as well as in specified types of handicrafts.

Minimum-age provisions are particularly difficult to enforce in small-scale industry, in non-industrial occupations and in agriculture. Where minimum age regulations are strictly enforced for industry alone, however, the result has been that children have been kept out of the larger factories, where conditions are relatively good, and are to be found in small back-street undertakings where conditions are unregulated and may be much worse. In the case of school-attendance regulations, enforcement is sometimes physically impossible owing to shortage of schools, teaching staff or lack of transport facilities. These problems exist even in the most advanced countries but they are especially acute in the less-developed countries with a scattered population where an adequate system of administrative bodies and labour-inspection services to supervise the application of minimum-age provisions is not yet in operation. In fact, in some of the industrially less-developed countries, conditions frequently recall those which prevailed in Europe at the time of the Industrial Revolution, when child labour was entirely unregulated.

In underdeveloped areas, where there is much general poverty, many children are still working to contribute to their own and their families' support, sometimes from such extremely early ages as 5 or 6 years. Until alternative means of support are available, it is unlikely that this position can be substantially altered without hardship to the children themselves, for economic necessity is stronger than any law intended to keep children out of employment or in school. Realization of this aspect of the problem has resulted in increasing importance being attached to school meals and other forms of social assistance through the schools; to family allowances; and to experimentation with schemes of practical education which enable the child, while learning, to contribute to some extent to his own support.

Premature employment of children is rife precisely in those areas where there is much underemployment of the whole active population, so that, from the point of view of the community, it is obviously economically unsound. From the point of view of the family the contribution which a child's earnings represent is extremely small and can be fairly cheaply offset by the provision of some social assistance.

#### Nature of employment

It has been considered necessary in most countries to provide exceptions to the minimum-age law allowing for earlier admission of children to employment on certain types of work or in certain cases. Some of these exceptions are made in the interests of the young persons themselves—for instance, those for work in, or connected with, technical or vocational schools or for apprenticeship. Another common exception relates to employment in family undertakings or work for parents and guardians. In a number of countries, the exceptions cover admission to work in certain non-industrial em-

ployments, such as domestic service, itinerant trading and public entertainment. In other cases, exemptions can be obtained for light employment in general or for certain particular types of light work such as occasional services and running of errands in industry or commerce, as well as light agricultural work. Poverty of the family is a common ground for exemption from minimum-age provisions.

These exceptionally early admissions to employment are frequently conditional on school attendance or the attainment of a specified educational standard. Exemption on grounds of poverty is thus made subject to the condition that the child has received a certain minimum of education in Costa Rica, Guatemala, Panama and El Salvador, while in Ecuador, he must have completed compulsory school attendance or be in attendance at an evening school. Employment at an earlier age is frequently permitted outside school hours or during school holidays. Many authorities consider it preferable to make such employment lawful—subject to strict regulation and proper safeguards respecting the age of the child, the nature of the work, the hours worked and educational requirements—rather than to prohibit it entirely and risk more harmful evasion. Thus, in Switzerland, federal law permits the employment of school children—on condition that it has no detrimental effect on their health, morals or education—for two hours on school days and five on holidays. Very similar provisions exist in the United Kingdom, Czechoslovakia and various states of the United States.

Compulsory school-attendance laws also frequently provide exceptions under which children may leave school for work before the normal age. Again, many countries allow them to do so only on reaching a specified educational level or if their help is needed in agriculture (Belgium, France, Ireland and the Netherlands) or for farm work and home duties (various provinces of Canada) or because of the poverty or sickness of the parents. These exceptions are also subject to safeguarding conditions with respect to the age and health of the child and are allowed only for limited periods of the school year. There are other exceptions not directly related to employment which tend to increase the number of children who are liable to take up work prematurely, especially in sparsely populated rural areas: children are frequently excused from school because of distance or lack of transport or school accommodations.

Where employment is controlled by the public authorities or is under the immediate supervision of the child's own family, it is possible that it may not be directly harmful; in areas where control is slight, however, and where the population is oppressed by poverty, children are known to be employed in occupations clearly injurious to their health or morals as, for example, in the making of carpets, picking of rags, street trading or begging.

Other measures besides exclusion have been adopted to ensure that children are not employed in ways harmful to them. These are, for example, the various forms of regulation of night work<sup>25</sup> now general in all in-

<sup>&</sup>lt;sup>25</sup> ILO Convention (No. 6), Nightwork of Young Persons (Industry), 1919, and the revised Convention (No. 90), 1948.

dustrialized countries, and extending into others; special industrial safety regulations dealing not only with the prohibition of young people from such tasks as the lifting of heavy weights or from work with substances under conditions harmful<sup>26</sup> to their growing organism, but also with their training in proper safety precautions and with the prohibition of their employment in connexion with dangerous machinery. Medical examinations to determine fitness for employment<sup>27</sup> are also being increasingly developed either generally as in Poland, France or Belgium or for particular industries such as mining. However, such protective measures are difficult of enforcement in underdeveloped areas, not only owing to inadequacy of labour inspection but also for such reasons as lack of capital in industry or insufficient development of medical services.28 As in all cases of protection, care is needed to ensure that the protective measures do not become oppressive. It has been necessary, for example, in many cases where medical examinations limit admission to certain kinds of employment, to ensure that those who do not gain admission are directed to other work more suitable for them. To this end, vocational guidance and preemployment medical examinations are in some cases being developed in conjunction with one another. Not only lack of controls but lack of synchronization in the introduction of controls have helped to perpetuate certain child labour problems: for example, the gap that still exists in many countries between the official or effective school-leaving age and the age when it is permitted to take up officially-controlled work has resulted in children entering undesirable occupations during the interval, where the latter are not subject to regulation or legal restrictions are not enforced.

Where relatively adequate protection has been ensured against the worst abuses affecting the age and strength of young people, attention is currently focused on the provision of better vocational opportunities for youth.

In conclusion it may be said that although vast numbers of children are still in employment throughout the world, it may reasonably be expected that with the increased productivity of adult labour and a consequent decrease in poverty, with a growing realization of the economic wastage of child labour, and with general improvement in standards of social welfare, the problem will continue to dwindle as it has, in fact, dwindled for these reasons in the industrialized countries within the last fifty years.

#### Women's employment

In an underdeveloped non-specialized economy, women's household tasks include preparation and fabrication of many articles for home consumption which, in a specialized economy, are the products of industry, and the movement of women into employment outside their homes corresponds to some extent to the growth of industrialization.

ployment), 1946.

28 ILO Convention (No. 15), Minimum Age (Trimmers and Stokers), 1921, which fixes age at 18.

In Asia, the Middle East and Latin America, a considerable proportion of agricultural labour is represented by women working unpaid for their families or as employed wage earners, particularly on large estates. In the former case they do not, of course, always figure in employment statistics. The percentage of the female population reported as "economically active" varies, in fact, between 8.3 per cent (in Spain) and 56.2 per cent (in Yugoslavia).29 The type of work in which women are engaged varies greatly, nor is it possible to find any one characteristic of women's employment that holds good in every country. It is true that the term "women's work" in some areas connotes tasks which are physically not exacting, which are unskilled or which bear, like nursing, teaching, dressmaking or service industries, some relation to women's household duties. In every area, however, instances of women's employment in contradiction to the locally prevailing conception can be found. In the world as a whole, women are, in fact, engaged in all types of work from heavy load carrying to the liberal professions, although locally various restrictions are placed on their employment by tradition, trade regulation or law. Nor can any internationally valid distinction be drawn by trade. Bricklayers' hod carriers, for example, are usually female in India and male in France, while the reverse is true in the case of domestic servants.

The question of women's participation in economic life cannot be divorced from such questions as the technical evolution of industry, the improvement of working conditions generally and the development of trade union organization nor from questions of social status, civic rights and education. Historically, the pattern of women's employment has varied greatly. When the Industrial Revolution of nineteenth century Europe brought large numbers of women workers into factory employment, conditions of work generally were poor. Reformers, concerned at first with the elimination of the worst abuses, sought, inter alia, to protect women in such ways as by regulating their hours of work, by limiting the nightwork which they might do, and by seeking to have them excluded from trades involving the use of substances particularly harmful (e.g., white lead, mercury, phosphorus, etc.), and from employment underground in mines, as well as by providing for maternity leave, etc. As conditions generally improved -with more strictly regulated hours of work, safer processes and better inspection—and as, with greater mechanization, work became lighter, the need for special regulation of female labour decreased. There has been of late a tendency to liberalize the original protective legislation, evidenced at the international level by the revision in 1948 of the Nightwork (Women) Convention adopted in 1919.

Countries where industrialization is of more recent origin, such as those of the Far East, seeking to obtain better conditions of work, commenced to regulate these conditions, starting, not unnaturally, with factory employment, always the easiest to locate and control. Special regulation in this case, however, has tended to some extent to keep women out of the factories—where conditions are relatively good-and to leave them in

<sup>&</sup>lt;sup>26</sup> ILO Convention (No. 13), White Lead (Painting), 1921, which fixes a minimum age at 18 (boys only).

<sup>27</sup> ILO Convention (No. 77), Medical Examination of Young Persons (Industry), 1946; also ILO Convention (No. 88), Medical Examination of Young Persons (Non-Industrial Em-

<sup>29</sup> See table 3 in International Yearbook of Labour Statistics 1949-50.

unregulated undertakings or jobs, very often as entirely unskilled labour. Where obligations are placed upon employers of female labour which make that labour expensive, it has in general been found that the employers seek to offset this expense by underpayment or by dispensing with female labour. It is now, however, widely accepted that the cost of social and welfare services and maternity protection should be borne by the community. For women workers this principle means that they are not penalized particularly as regards remuneration and employment opportunities on account of the protective measures which are required on their behalf.

Some tendencies of modern industry have a very noticeable bearing on women's employment—for example, the tendency to break down operations into the simplest components, which permits the employment of large numbers of unskilled and semi-skilled workers, and the tendency to require an increasingly high degree of qualification of the skilled technicians employed. The first phenomenon has contributed, along with the general improvement in working conditions, to the opening of industry to women, even in areas where they have little opportunity to acquire either education or vocational training. The second has, in time of manpower shortage, as during the last war in the United Kingdom—and the United States in particular—led to women being trained for more skilled or more highly-graded work.

Although in most countries women workers are still among the first to be released in times of unemployment, they are beginning, nevertheless, to constitute a recognized integrated element of the labour force rather than a reserve to be drawn upon in time of shortage or a supply of cheap labour for specific occupations or industries. This fact, together with a general tendency to provide more welfare services for all workers, has led to the development of certain facilities which lighten the task of those who combine home responsibilities with wage-earning employment. These facilities include establishment of canteens and other feeding facilities near the workplace, arrangements for domestic help in emergencies, school meals, organized supervision of children outside school hours and during holidays, communal laundries, mending centres and special shopping arrangements. Such facilities are thus far limited, however, to those countries which are most industrialized and where welfare facilities for the workers are most widely developed; yet even in these cases provision is still considered inadequate.30

It has been noted earlier that women workers are, as a category, paid low wages. This fact is, of course, closely bound up with the prevalent lack of skills among women workers, but the differential exists also between men's and women's employment within the unskilled group, between so-called women's trades and men's trades, and between the wage rates of men and women performing exactly the same work.<sup>31</sup>

30 "Facilities for Women Workers with Home Responsibilities", International Labour Review, vol. 63, no. 3, March 1951,

Circumstances have brought the whole question of women's pay to the fore in recent years, for women have been employed in jobs previously performed by men. They have obtained access in many instances to types of education and training previously barred to them and they have been playing a more active part in the economic, social and political life of their countries. In some countries they have only recently acquired civic rights. The introduction of family allowances, social security and other social measures (e.g., free education, school meals, etc.), is lessening the need for granting the male worker a higher salary on which to support a family.32 At the same time, investigations have shown that many women workers today are, in fact, themselves supporting dependants. An international convention on the principle of equal remuneration for men and women workers for work of equal value was adopted in 1951 by the International Labour Conference. Discussions on the feasibility and the methods of applying the principle are proceeding both at the international and national levels.

#### MOBILITY OF LABOUR

There is constantly in all areas, and at all stages of economic development, a certain proportion of the labour force that must change either its type of employment or its place of employment, or both. In order to ensure that the supply of manpower is at all times adapted to the requirements of the economy, steps must be taken to encourage and facilitate occupational, industrial and geographical mobility.

Many obstacles, however, stand in the way of mobility of labour. The most important among them seem to be:

- (a) Lack of adequate and reliable information concerning job opportunities and working and living conditions in other occupations and areas;
- (b) Personal resistance to a change of occupation or residence, or both, including the tendency for workers to carry on their fathers' trades as a tradition;
- (c) Lack of the necessary skill to fill the available jobs, and of adequate and suitable training and retaining facilities to develop and adapt skill;
- (d) Cost involved in changing from one occupation or area to another;
  - (e) Restrictions on entry into various occupations;
- (f) Differentials in wages, working conditions and the cost of living from one occupation, industry and area to another;
- (g) Lack of suitable housing in areas with job opportunities;
  - (h) Lack of transport means;
- (i) Discrimination in employment, based on sex, creed, colour, age, disablement, etc.

Various efforts have been made in recent years to remove some of the obstacles to mobility of labour, and in all such programmes the employment service or-

p. 287 et seq.

31 It must be borne in mind, of course, that women's average earning, as opposed to their wage rates, are influenced by the fact that it is chiefly women in the younger, and therefore lower paid, age-groups who are in employment; that a relatively large proportion of them are engaged in unskilled and low-paid occupations; and that they do less of the highly paid overtime night shift work than men.

<sup>&</sup>lt;sup>82</sup> Equal Remuneration for Men and Women Workers for Work of Equal Value, Reports V and VII to 33rd and 34th Sessions of the International Labour Conference, 1950 and 1951, respectively.

ganization occupies a prominent place. Most industrially developed countries in Europe, North America and the British Commonwealth possess good employment services. In the less-developed countries, however, employment services do not exist or are insufficiently developed. Many of these countries have become conscious of this weakness, particularly in connexion with their economic development plans, which create new manpower needs, often in new occupations and areas.

Other action which may help promote labour mobility includes the expansion of vocational guidance, which has been developing rapidly over the last few years sometimes in conjunction with the employment service, sometimes in connexion with the schools. It provides friendly and accurate advice to individual jobseekers. In the case of young people, a general tendency of guidance services is to suggest at the outset a direction in training or employment—which is in keeping with their aptitudes and the general employment outlook and which will give them a fairly wide and solid basis of experience—and to oppose any tendency to premature specialization. In the case of adults forced to change their occupation midway in their lives, guidance has helped by discovering aptitudes previously unused or experience acquired in one job which has potential application to others.

In the case of adult training, industry itself has in some cases taken the initiative. In the highly industrialized countries such as the United States, the United Kingdom, Belgium and France, large undertakings provide in-plant training to their employees, with a view to increasing productivity, as well as to ensuring a greater occupational mobility and adaptability. In order to make such training most effective, methods for instructing adults, usually based on job analysis, have been devised; these have been supplemented by the use of films and other audio-visual aids. Soon after the initiation of these training programmes it was realized that their success depended very largely on the supervisory personnel responsible for giving such training on the job, and such personnel are now, in many cases, systematically prepared for the task of instructor. In the underdeveloped countries, where a lack of adequately trained supervisory personnel is proving to be a serious handicap, efforts are being made in many cases to hasten the training of supervisory staff.

Apart from these new developments, the traditional method of organizing public classes outside working hours to give the workers opportunity to prepare themselves for other jobs or higher posts is employed to meet a very wide demand. It is of particular benefit to workers in small undertakings, where facilities for inplant training are meagre or non-existent.

# SOCIAL SECURITY AND THE WORKER

While it is first of all through their contact with their employers that workers may seek to obtain better wages, better conditions and greater security, they may also, in company with other citizens, seek income security through private insurance or State-sponsored social security. While the extent of private insurance operations of this kind is difficult to ascertain, much information is available regarding State social security systems, and there is evidence of their rapid development.

In some cases benefits obtainable under these schemes are sufficiently substantial to enable workers to meet exceptional expenses due to contingencies such as sickness or maternity which would otherwise deplete their savings or run them into debt. In a significant number of countries, however, these benefits as yet constitute little more than a token form of assistance.

Descriptions of these national social security schemes, or even of significant developments such as extension of coverage, are not discussed in this report for reasons explained in the Preface. They will be considered in the supplementary report on measures to raise standards of living, which is scheduled for publication in 1954. Work in the field constitutes an important part of the programme of the International Labour Organisation, and recent ILO publications bearing on the subject are available.33 Certain aspects of the problem are also touched upon in chapter VIII.34

# Worker-employer relations

The group of wage-earners and salaried workers dependent on an employer is both numerically and proportionally important in most countries,35 and the relationship between employers and their workers has, therefore, a very wide influence on conditions of life and work in general. In many areas today, however, particularly those where industrialization has progressed farthest, the individual relationship is overshadowed to a great extent by the relationship between organizations of workers (trade unions) and employers.

Reference has been made earlier to the role of the trade unions in giving the workers collective strength to prevent exploitation, to obtain better conditions, or to ensure the application of social measures in default of official enforcement.

In the nineteenth century, in Europe, the legality and desirability of organizations for such purposes was hotly contested, not only by employers zealous to defend their own interests, but also by many who feared a return to the restrictive practices of the earlier guilds and companies which had, from the time of the French Revolution on, been abolished or abandoned in country after country in order to secure both to master and to servant the fundamental right to work freely.36 Today, the opposition has generally receded. The representation of collective interests is accepted as a necessity of the present structure of society, many countries have given legal status to the unions and, even on the international plane, the principle of freedom of association has been proclaimed as "essential to sustained progress".37 It has been given legal effect through the adoption by the International Labour Conference of two

<sup>33</sup> See especially Post-War Trends in Social Security, 83 pp., 1949; International Survey of Social Security, 236 pp., 1950; Minimum Standards of Social Security (International Labour Conference, 35th Session, Report V(a)(2)), 313 pp., 1952; The Cost of Social Security, 67 pp., 1952.

34 See also Economic Measures in Favour of the Family, 1952; Methods of Administering Assistance to the Needy, United Nations document E/CN.5/273, 1952.

35 See table I

<sup>&</sup>lt;sup>36</sup> ILO, Freedom of Association, Studies and Reports, Series A, vols. 28-33, 1927 and 1930, for the historical development and the legal status of trade unions. <sup>37</sup> ILO, Declaration of Philadelphia (1944), part I.

conventions.38 Moreover, special international machinery<sup>39</sup> has been set up by the International Labour Organisation, in full agreement with the United Nations, to examine any charges of infringement which might be brought against member States of the ILO or United Nations. Thus, the international action taken reflects widespread agreement on the principle, but charges already brought are evidence of different concepts of trade unionism which have evolved against different social, economic and ideological backgrounds.

Despite these differences, trade unions have, in the main, followed similar courses of evolution, of which earlier or later stages are now observable in the various countries according to the length of their trade-union history and the rapidity of economic and industrial development.

As long as they are illegal or barely tolerated, the methods of the unions are, of necessity, crude, as is also the reaction to them. In the early stages, they are seen as engaged in a species of tug-of-war with the employers, both sides resorting to strike or lock-out to test one another's endurance and drive the hardest bargain possible. At a later stage, where they have achieved recognition as responsible organs representing the interests of an important section of the community, they are more often consulted and informed about matters of concern to the workers and are given opportunity to put forward and press their point of view, with the result that there is usually greater readiness on both sides to make concessions in the general interest. At this stage, too, they frequently achieve the standing of an institution recognized by the government as a socially necessary counterweight to the economic power of the employers. Indeed, in some areas, such as the Far and Middle East, where, for various reasons, unions have either not emerged spontaneously or else have not developed rapidly, some governments have themselves taken a hand in setting them up.

Once recognition by employers and State has been achieved, the unions are in a position to participate in collective bargaining on a much wider scale. The results of negotiations undertaken at a high level often apply not only to workers in one undertaking but throughout an area or an industry. The general necessity for collective bargaining<sup>40</sup> on a more or less wide scale and in accordance with the degree and type of economic development is now recognized in most industrialized countries, and in the United Kingdom, France, the Scandinavian countries, etc., agreements concluded on an industry-wide or national level are the most important determinant of the conditions of employment enjoyed by the individual worker in most of the basic industries. Such negotiations not only provide the unions with a more peaceable method of fulfilling the

task, but they gain therein experience of negotiation, responsibility and self-discipline, which contributes to harmonious relations in industry. Thus, under most collective agreements, the trade unions voluntarily forego their right to strike for the period of the agreement in favour of an agreed conciliation or arbitration procedure.

This stage of development—when the trade union has become a recognized institution—is, in fact, characterized by increased recourse to conciliation as a method of settling disputes and by the setting up, in many instances by the public authorities or the parties concerned, of special conciliation machinery. A further development is voluntary or compulsory recourse to arbitration, sometimes with enforced acceptance of the arbitrator's ruling, as in Australia and New Zealand.41 On the whole, however, such arbitration is usually confined to periods when, or to sectors of the economy where, it is considered that any stoppage of work would be against the public interest—as, for example, in time of emergency or in essential public services.

In some cases national industrial councils, on which both workers and employers are represented, are charged with the continuing task, not only of determining conditions of work but also of making official recommendations or plans in such matters as recruitment, training, or even operational policy of the industry or industries concerned.

At the level of the undertaking, a similar form of bipartite collaboration is being evolved with the appointment of works councils, safety or hygiene committees, shop stewards, etc. Representation of all the workers within a particular undertaking enables them to contribute towards progressive improvement of working and living conditions and towards the raising of productivity and the improvement of the organization of production.42

In short, the present situation is that trade unions contribute effectively to the protection of the workers as a group wherever they have achieved recognized status and can perform adequately their major functions of negotiation and collaboration. In addition to their basic tasks, trade unions have undertaken others too numerous to list in this brief survey but including assistance to individual members, operation of insurance schemes, employment agencies and many social and cultural activities.

While the unions are generally widening the scope of their activities and growing more powerful, they endeavour to place their organization upon a firm foot-

Association, established 1950.

<sup>42</sup> The subject of co-operation is at present in process of discussion by the International Labour Conference. See Co-

<sup>38</sup> ILO Convention (No. 87), Concerning Freedom of Association and Protection of the Right to Organise, 1948; Convention (No. 98), Concerning the Application of the Right to Organise and Bargain Collectively, 1949.

39 Fact-Finding and Conciliation Committee on Freedom of Association, established 1950

<sup>&</sup>lt;sup>40</sup> Reports on Industrial Relations and on Application of the Principles of the Right to Organise and to Bargain Collectively, Report VIII to 31st Session, International Labour Conference; Report V to 32nd Session; Report IV to 33rd Session; and Report V to 34th Session.

<sup>&</sup>lt;sup>41</sup> See reports as above, and Recommendation (No. 92) concerning voluntary conciliation and arbitration.

discussion by the International Labour Conference. See Cooperation between Employers and Workers at the Level of the
Undertaking, Report VIa(1) to 35th Session, International
Labour Conference, 1952, and Report VI to 34th Session, 1951.
For a full survey of the extent and methods of such
co-operation see Co-operation in Industry: Workers, Employers,
Public Authorities, ILO Studies and Reports, New Series,
no. 26, 1951. See also Methods of Collaboration between the
Public Authorities, Workers' Organisations and Employers'
Organisations, ILO, New York, 1941, and War-time Developments in Government-Employer-Worker Collaboration. ILO. ments in Government-Employer-Worker Collaboration, ILO, Montreal, 1941.

ing, as regards both their material position and their membership. In some countries this endeavour has resulted in the unions' entering the political field. In others, it has given rise to certain practices within the craft or industry organized, such as the fixing of high membership dues, closed or union shops, and other measures to increase the security and better the conditions of the members' employment. While such policies are to some extent necessary safeguards for the maintenance of the unions and the orderly regulation of the trade or industry, they have, where generalized, been criticized as restrictive of the workers' freedom to organize and as being ultimately detrimental to the workers' interests.

The development and functions of trade unions are, of course, different in the cases of countries where the State has taken over all means of production and manages the whole economy on behalf of the workers, in accordance with long-term and short-term economic plans which have the force of law. Since in such cases the State is itself charged with both the management and the protection of the workers, the role assigned to the trade unions is that of promoting productivity and discipline and carrying out certain executive functions usually reserved in other countries to public authorities, such as labour inspection, social insurance, and the application of other social welfare measures. This function of connecting link between the State and the individual worker is, of course, vested in each of those countries in a single, unified trade-union organization.43

It is perhaps appropriate at this point to attempt some assessment of the extent to which the trade-union movement does in fact reach and serve the working population in the various parts of the world. For a true view of the situation, it would be necessary to study not only the unions' membership, revenue, premises and facilities, information services, etc., but also to examine their methods of action, which might be judged from figures pertaining to their expenditure, the number, duration and outcome of strikes, the collective agreements concluded, the disputes settled by arbitration, their representation on joint or public bodies, etc. Within the framework of this brief survey, some facts relating to international trade-union affiliation alone may, however, be taken as indicative.

Within the last thirty years trade-union organizations throughout the world have greatly increased their membership, secured recognition from governments almost universally, and won wide acceptance among employers and in the public mind. In swiftly changing economic and social systems, trade unions have assumed new tasks and new responsibilities in the national community and established themselves as an integral part of the machinery of modern society. They have also transcended national boundaries and taken an everincreasing part in international life. This is particularly true for Europe, where trade unionism has the oldest tradition, as well as for North America, Australia and New Zealand. The phenomenon is as yet less clearly visible in most of the countries in Latin America and Asia, and it is still in the initial stages in the Near and

Middle East (with the exception of Israel) and in Africa (with the exception of the Union of South Africa and one or two of the more advanced non-metropolitan territories). Broadly speaking, however, modern trade unionism has penetrated into the remotest corners of the earth, and its powerful surge is one of the most striking features of modern history.

At the same time there has become apparent within the ranks of labour a deep-rooted and widening division which is attributable, to some extent, to the new responsibility which the trade-union movements of the world have assumed in the national community, and to the role they are consequently called upon to play in its external relationships. In the advanced countries, especially, the trade-union movements have long since outgrown their original elementary strategy of what has been described above as a "tug-of-war" with employers. They now aspire to, and often actually assume, coleadership in shaping the destiny of the nation. This has brought them face to face with issues of fundamental national policy and also with the realities of clashes of "national interests" and the not less bitter clash of ideologies cutting across national boundaries. The Utopian internationalism which inspired the early labour movement proving helpless in the face of these realities, the present-day movement has not remained impervious to the tensions and rivalries which divide this modern world.

Internationally, labour is organized in three major trade union organizations. The oldest of these is the International Federation of Christian Trade Unions (IFCTU), with some 3,300,000 members in fifteen countries; it has been in uninterrupted existence since its foundation at The Hague in 1920. The World Federation of Trade Unions (WFTU) was established at a congress held in Paris in October 1945. Delegations from fifty-three countries representing 65 million workers participated. At the time, the Federation comprised practically all national federations of trade unions not already otherwise affiliated, with the notable exception, however, of the American Federation of Labor. In January 1949, a (long-foreseen) split occurred in the WFTU. Certain organizations in Western Europe, the United Kingdom, the British Commonwealth and America disaffiliated from the WFTU and regrouped themselves, together with the American Federation of Labor, in the International Confederation of Free Trade Unions (ICFTU), set up in December 1949 at a congress in London, where delegations from fifty-one countries and territories represented 48 million workers. Smaller international organizations are the World Union of Liberal Trade Union Organizations, which is at present limited to Europe, and the International Working Men's Association; the latter comprises organizations and action-groups of the syndicalist type.

According to the figures reported by the various international trade-union bodies, these organizations comprise together about 140 million organized workers in over eighty countries and territories throughout the world. This figure, however, does not represent all of organized labour, an important part of which is not internationally affiliated. (In some countries international affiliation is forbidden or restricted by law; in

<sup>43</sup> The Trade Unions in Soviet Russia, ILO Studies and Reports, Series A, vol. 26, 1927; also Co-operation in Industry, ILO Studies and Reports, New Series, no. 26, 1951.

others national federations of trade unions have elected to remain independent; and in most countries there are numerous craft, industrial and professional unions which have remained outside the existing federations of trade unions.) The figure given also represents but a small percentage of the global figure of wage and salary earners. It has significance, however, as an expression of the interest of workers in unification on a worldwide scale for the purpose of strengthening labour's position in international affairs. The figure should be compared with that of some 24 million workers from twenty-four countries affiliated in July 1921 with the International Federation of Trade Unions, which dissolved in 1945 with the foundation of the WFTU. Factors such as natural growth of population and increasing labour force have unquestionably contributed to the growth of unionization, but after allowance is made for these factors, the growth still remains impressive. It is also an outstanding fact that, while the International Federation of Trade Unions of 1921 was predominantly composed of European organizations, the present-day international bodies mostly draw their affiliates from all continents, including the non-metropolitan territories.

The two great rival international trade union organizations claim individually the following memberships. The WFTU, at its second congress held in Milan in July 1949, reported 72 million members in forty-eight countries and territories; in November 1951, on the occasion of the fifth session of its General Council, in Berlin, it claimed 80 million, but no break-down as to countries and organizations is available. The ICFTU now reports a membership of 53,500,000 in ninety-four organizations in seventy countries and territories; new countries and organizations have been admitted since. In general, trade-union membership figures are unstable, being affected by almost all vacillations of a social, economic and political nature that take place on the national and international level. In many parts of the world information concerning trade-union membership is highly contradictory. This may be explained, on the one hand, by the rapidly shifting character of tradeunion membership for political, economic or other reasons and, on the other hand, by the different criteria applied by various sources for establishing such figures. These factors should be taken into consideration in any study of the relative strength of the various international trade union organizations.

An interesting recent development is the tendency of the major international trade-union organizations to decentralize their activities to some extent. The International Confederation of Free Trade Unions has gone farthest in this respect. A European Regional Organization was set up at a conference in Brussels in November 1950; it groups twenty-two central federations from twenty countries and has an aggregate membership of some 21 million. This regional grouping in Europe had been preceded by the Committee for Trade Union Cooperation of the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) and the Benelux Trade Union Committee (Belgium, Luxembourg and the Netherlands), which both continue to exist. For the Americas, an Inter-American Regional Organization of Workers (ORIT) was established at a conference held

in Mexico City in January 1951. This new regional organization, which replaced and widened the Inter-American Confederation of Workers (CIT), set up in January 1948, comprises some 20 million members in twenty-six countries and territories in Northern America (United States and Canada) and in Latin America (Central and South America, including the Caribbean area). Finally, at a conference at Karachi in May 1951, the Asian organizations affiliated with the ICFTU established an Asian Regional Organization which, at the time of its birth, grouped some 8 million members in nine national federations in eight countries. Mention may also be made in this connexion of a West and Central African Regional Trade Union Conference which was held in March 1951 at Douala (French Cameroons) under the auspices of the ICFTU.

Similarly, the World Federation of Trade Unions maintains a liaison office in Peking, by decision of its Asian and Australasian trade-union conference held there in November 1949. A full-fledged regional organization within the WFTU is the Latin-American Confederation of Workers (CTAL), which was founded in September 1938 and which was for a number of years, the only international workers' association in Latin America. Eventually, due to political factors, and perhaps more essentially to divergent attitudes on questions of ideology and tactical methods, schisms occurred in the CTAL and various groups broke off, while new national organizations were formed which remained independent of the CTAL (most of the organizations disaffiliated from the CTAL, or formed independently, eventually regrouped themselves, first in the CIT and later in the ORIT). In West Africa, the WFTU sponsored a first regional conference in April 1947 at Dakar (Senegal); a second conference was held in October 1951 at Bamako (French Sudan) under the auspices of its French affiliate, the Confédération générale du Travail.

The International Federation of Christian Trade Unions recently set up a liaison office for Latin America at Bogotá. Its French affiliate, the Confédération francaise des Travailleurs chrétiens, organized a conference of its West and Central African divisions at Lomé (Togoland) in October 1950.

This short survey of the international trade-union movement would not be complete without mentioning the existence of a large variety of international occupational organizations. Their total number now exceeds seventy. Some are associated with the International Confederation of Free Trade Unions and are usually referred to as International Trade Secretariats. Others form Trade Departments of the World Federation of Trade Unions. The International Federation of Christian Trade Unions likewise comprises a number of international occupational organizations. Finally, there are a number of such organizations which are not affiliated or associated with any of the existing international federations of trade unions; this is particularly true of international organizations formed by professional workers, such as teachers, engineers, supervisory staffs, journalists and business representatives.

The central international trade union organizations, to which reference has been made above, comprise a

majority of the roughly 300 federations of trade unions which exist in the world and of which some ninety operate in Africa, some sixty in Asia, some sixty-five in Europe, some seventy in Latin America, five in North America and two in Oceania. The International occupational organizations, though they have in recent years considerably widened their contacts, still only group a minority of the some 5,000 important national craft, industrial and professional workers' organizations which are estimated to exist in the world.

#### Conclusion

In this brief survey of conditions of work and employment it has been possible only to sketch the stages of development reached in the different areas of the world and the form that some of the more universal problem of the workers has taken.

If on the basis of this review, which of necessity assembles information from heterogeneous sources and presents labour problems outside their full local context of social and economic life, it is possible to draw any general conclusion, it would be that the situation today is in many respects better than it was sixty-odd years ago, when an international conference of social reformers was advocating, as a desirable standard that might

ultimately be achieved fairly widely, the exclusion of children of 12 years from employment in mines or the restriction of the employment of young people under 16 in "peculiarly unhealthy or dangerous work". In some areas such standards have long since been achieved and actual practice has gone beyond them. In many others, even where labour conditions still lag far behind, this situation is no longer accepted with equanimity either by public opinion or by responsible authorities.

A further conclusion would be that labour problems are inextricably interrelated and that an organized, coordinated approach to them is therefore necessary at every stage, from the first remedying of obvious abuses to the stage when, material well-being having been achieved, efforts are directed towards the ensuring of freedom and dignity, economic security and equal opportunity.

As society grows more complex, so do the technicalities of improvement and maintenance of good conditions of work and employment, while the mastering of these technicalities and their adaptation to different geographical and social conditions, are among the heaviest tasks confronting the peoples of the underdeveloped areas of the world today.

# Chapter VIII

#### SOME SPECIAL CIRCUMSTANCES AFFECTING STANDARDS OF LIVING

#### Introduction

In every society there are special circumstances or contingencies which affect individuals within the population and which, unless special provisions are made, lead to a subnormal standard of living on the part of these individuals—whatever the normal standard may be in the society in question. These special circumstances are many in number; they vary from society to society and from period to period as the general social, economic or political situation changes. Indeed, economic and social development benefiting society at large may at the same time create special classes of needs. There are, however, a number of very widely occurring conditions that call for special attention and assistance: lack of income for various reasons; family situations or lack of family—depriving children of normal living conditions and opportunities; old age with its infirmities and economic dependence; physical or mental handicap; refugee status, statelessness and like political handicaps; homelessness because of natural calamity or war devastation. These contingencies, and many others, cannot be wholly prevented or remedied by measures for the general welfare.1

Systematic information on the extent to which such special problems and needs exist in different parts of the world is largely lacking. The real extent of needs is usually revealed only as administrative services are created to meet them—that is, systematic information concerning vulnerable groups in a country does not tend to become available until large-scale, organized effort is made to improve their welfare, involving identification and enumeration, or at least very careful estimation, of cases. In areas in which the problems of vulnerable groups are perhaps most acute—those in process of economic and social transition—it can be stated only that the needs are far out of proportion to the resources being applied to meet them. Even among countries with more-developed services there are marked differences in the extent to which these countries recognize and define the circumstances in which special services are needed.

Different types of society with different economies meet these problems in different ways. Among rural peoples of economically underdeveloped areas who are more or less self-sufficient economically and socially, consuming their own products and depending on their own locally-provided social services, the extended family or community of kinfolk spreads as wide as possible the responsibility for meeting the risks and uncertainties of individual life. Despite its many psychological advantages, however, this system of mutual aid obvi-

ously does not suffice when the whole locality is stricken by such major disasters as flood, drought, earthquake, typhoon, plague or war. In such cases outside support is required. Even where special problems seem to be met by local aid, they are often met on a necessarily limited scale because of the insufficiency of local resources.

At the stage of economic development when more and more people get their livelihood from selling goods and services, when large commercial and industrial centres emerge and family members move away into paid employment, social problems (like economic problems) increasingly demand organized efforts on the part of units larger than the extended family or the neighbourhood. The individual becomes part of, and dependent upon, a larger, more impersonal community in his social, economic and political life. As the area of interdependence expands, so does the problem of social responsibility. There appear more and more handicapped or destitute individuals whom traditional systems of aid do not affect. At the same time, the process of development, by increasing productivity, income and governmental financial and technical resources, makes possible the creation or expansion of social services to meet the needs of these vulnerable groups. Furthermore, as the community expands and corresponding social responsibility expands it would seem to be usual for governmental action to place a floor under living standards and render assistance when other resources do not suffice; and for the standard of need or adequacy (le minimum vital) to be progressively re-defined in conformity with rising levels of production and consumption, changing scientific conceptions, and changing ideas of justice. In general, however, social services have lagged behind the growing or increasingly evident needs.

#### LACK OF MEANS OF LIVELIHOOD

Problems of need arise when—for whatever reason—income becomes inadequate to maintain a satisfactory standard of living. This inadequacy of income may arise either when resources go down (e.g., with inability to earn a living); or when expenses go up (e.g., with increases in the number of family dependants); or when both occur simultaneously (e.g., in the case of illness or death of the breadwinner).

Material need of this kind, depressing the living standards of particular persons and families, has given rise to a number of social services, over and above the mutual aid of the family, and, in more developed societies, the prudential and contractual arrangements made by individuals or groups with employers or with private insurance companies. Some of these services are provided by acts of religious or secular charity, whether spontaneous or organized, and whether non-governmental or governmental. Some are manifestations of solidarity among persons who band together voluntarily into fraternal associations for purposes of mutual aid.

<sup>&</sup>lt;sup>1</sup> All the conditions of handicap and deprivation that result from racial, religious or similar discrimination, while not considered in this report, logically should be classified here. Conditions of unemployment and related conditions are discussed in chapter VII.

Other services, which generally represent an advanced stage of development, are provided on the basis of statutory rights to income by means of the taxing power of government. The living condition of individuals faced with loss or lack of their means of livelihood will clearly be affected by the nature and extent of the services available to them.2

Some of the latter services aim at preventing need by assuring a substitute income or supplementing a normal income in the event of certain calculable and foreseeable risks. Such are the social insurances, which now provide compulsorily for specified categories of persons in certain contingencies, in some fifty countries.3 Those who may benefit range all the way from wage earners in particular occupations to the economically active population as a whole; and, in a few countries, the whole resident population is included. The contingencies covered vary, and may include some or all aspects of morbidity, childbirth, childhood, dependency, old age and unemployment. The benefits provided also vary greatly. Among services of this type are also the publicly-financed pensions provided for all old people, as in Canada, New Zealand and Sweden, and for families with dependent children in a number of countries with non-contributory family allowance systems.4

Other services are directed not against presumptive need, with a view to preventing it from developing into actual need, but against need when it has actually arisen.5 Some twenty countries (of which nearly all are in Northwestern Europe or Northern America) have developed systems of "general assistance" under which a person or family has a right to public aid if adjudged to be in actual need. Some thirty countries (including France and the Union of Soviet Socialist Republics, as well as nearly all of those with systems of general assistance) have developed systems of "special assistance" under which persons and families have a right to public aid if adjudged to be not only in actual need but also faced with some special contingency such as old age, disablement or loss of breadwinner.6

The proportion of the population adjudged to be in need of assistance because of inadequate resources varies greatly from country to country. It reaches about 8 per cent in several countries that rely more on assistance than on insurance; but it is nearer to 4 per cent in several countries that rely mainly on social insurance

but find that there are residual needs which insurance does not meet. Among the less-developed countries, governmental assistance to needy persons through income maintenance has been little developed in general; but in some islands on which the plantation system has been established and on which the extended family is no longer normal, a considerable portion of the population—in one case as much as 10 per cent—is adjudged to be in need of public assistance.

In a number of other countries, where governments do not make continuing provision for maintenance of individual or family income, they have nevertheless recognized the prevalence of privation and destitution, and have provided, out of public funds, extensive supplementary feeding by such means as soup kitchens, popular restaurants, and maternal and infant feeding centres.

Countries with low national income and small governmental budgets are often faced with the problem of how and how far they should devote their limited resources to the relief of existing need, while at the same time financing economic and social development programmes designed to reduce future need. Many projects, of course, serve both ends.

# Some special problems of children<sup>7</sup>

In all societies children constitute a highly vulnerable part of the population, and it is generally recognized that when, for one reason or another, the family is unable to provide adequately for children, other authorities, such as the State, must step in to protect them through income maintenance, guardianship, custody or other means. The substitution of the small family for the extended family has increased the risk a child faces of having an incomplete family or no family at all in which to grow up, as a result of death, divorce, separation or illegitimacy. The United States, for example, reports that 6 million out of 46 million children in 1948 were not in normal families consisting of a father and mother living together—in 2,500,000 cases because of divorce, separation or desertion. The consequences of modern war for the family life of children hardly need emphasis. In Yugoslavia out of 6 million children, some 600,000 are reported to have lost one or both parents by death—in half of the cases as a result of the war. A slightly larger proportion of loss is reported for Greece.8 Over 50,000 children in the Republic of Korea are estimated to have been orphaned by war as of early 1952, with 18,000 in orphanages.9

Even among countries with the most developed economies and social services, however, there are great variations in the extent to which the State supplements the activity of relatives and non-governmental agencies in meeting the needs of children. This State activity

<sup>&</sup>lt;sup>2</sup> Since this report is centred on existing conditions rather than on measures and services to raise standards of living, and will be followed by a companion volume designed to describe such measures and services, no attempt is made in the present volume to give a comprehensive review of the various types of social services. It is recognized that this emphasis upon existing conditions, as mentioned in the Preface, imposes limitations upon all chapters in the report but especially upon the present chapter where need and service are so obviously interrelated, as well as upon chapter VII on Conditions of Work and Employment (see especially p. 115).

3 ILO, International Survey of Social Security, Geneva, 1950.

4 United Nations, Economic Measures in Favour of the

<sup>&</sup>lt;sup>5</sup> Methods of Administering Assistance to the Needy, United Nations document E/CN.5/273, 1952; Information from Non-Self-Governing Territories, Analysis of Information on Social Welfare Problems, United Nations document A/922, 1949; and United Nations document ST/TRI/SER.A/5, pp. 124 ff.

<sup>&</sup>lt;sup>6</sup> Most countries with both types of assistance provide special assistance at slightly higher levels than general assistance.

<sup>&</sup>lt;sup>7</sup>Cf. United Nations, Annual Reports on Child and Youth Welfare 1946 (1948), 1947 (1949), 1948 (1951); Methods of Social Welfare Administration, 1950; Children Deprived of a Normal Home Life, United Nations document E/CN.5/237/Rev.1, 1952; Information from Non-Self-Governing Territories, Analysis of Information on Social Welfare Problems, 1949; and UNICEF, Continuing Needs of Children, United Nations document E/ICEF/142 and add. 1949.

8 Cf. T. Brosse Homeless Children UNESCO. 1950.

<sup>8</sup> Cf. T. Brosse, Homeless Children, UNESCO, 1950. <sup>9</sup> Estimate transmitted by the United Nations Korean Reconstruction Agency.

may run all the way from complete assumption of responsibility for the care and maintenance of a child to supervision under certain circumstances of the care and maintenance provided by parents, relatives or non-governmental organizations. The following figures, which have been made available to the United Nations for use in official documents, are presented for illustrative purposes only. They demonstrate the difficulty of valid comparison, and are affected, on the one hand, by the extent of the need (which in some cases has been particularly augmented as a consequence of the war), and, on the other hand, by the extent of government recognition of need.<sup>10</sup>

Very extensive State action has been reported from some countries of Northern Europe, with governmental bodies assuming some responsibility for the welfare of as much as 5-8 per cent of the child population. In Sweden, for example, during 1950, over 32,000 children were in the custody of the local child welfare committees, and 56 per cent of these children were cared for in foster family homes; the total number of children placed in foster family homes through the child welfare committees or by their parents or guardians, and in both cases under supervision by the child welfare authorities, was over 44,000; the number of illegitimate children under supervision of a child welfare guardian, who according to law must be appointed for every child born out of wedlock, was 85,000 in 1948; and the number of children of divorced parents placed under similar supervision was 13,000. In Denmark, 40,000 are held to need supervision in their homes because they are illegitimate and under 7, or because their parents receive certain forms of public aid; and 13,000 because they have been placed in foster homes either by their parents or by local government action.

In France, in 1948, some 100,000 children were "wards of the State"; and 130,000 received State assistance in order that their family ties might not be broken; 150,000 were "wards of the nation" (war victims); and children's institutions provided for 70,000; yet the Government estimated that at least another 50,000 were not receiving the care that they needed for reasons of social maladjustment. The USSR had, in 1947, some 300,000 children in grant-aided foster families and 800,000 children in children's homes, with 54,000 of the latter in the Ukrainian SSR. In two of the three provinces of Czechoslovakia, in 1947, the authorities had placed 30,000 children in foster homes and 45,000 in boarding institutions. Greece has over 75,000 children in publicly-aided foster families (often families of relatives) and 10,000 in institutions. In Poland, in 1948, the Ministry of Education was paying State allowances for 75,000 children of school age in foster families and had 100,000 boarded in children's homes and hostels. Yugoslavia was giving regular monthly allowances in support of nearly 190,000 orphaned children living with relatives or in foster families, besides giving some assistance to many others.

The United Kingdom has about 100,000 children in the care of local authorities and voluntary organizations, of whom one-third are placed in foster families and two-thirds in children's homes. Canada has about

30,000 in the care of children's aid societies and other governmental and non-governmental bodies, over onethird being placed in private families or boarding homes, and nearly two-thirds in child-care institutions. The Netherlands entrusts the care of 35,000 to child welfare organizations, mainly non-governmental, besides placing other children under supervision but letting them remain with their families. The United States estimates about 250,000 children receiving child welfare case-work services from public welfare agencies, with more than a third in the homes of parents or relatives, and another third in foster family homes. New Zealand has 3,200 wards of the State and 5,000 others who are State-supervised. The Union of South Africa supervises or controls 13,000 in institutions and still more in foster families or in their own homes.

Problems of child care appear to exist in all areas where economic and social changes are under way, and the need for similar services to meet these situations is increasingly recognized. Thus, the French Government has reported in respect of Morocco: "The number of children in need of assistance increases from year to year, and [non-governmental] orphanages increasingly tend to ask the State to assume responsibility for practically all their expenditures." The United Kingdom Government has similarly reported: "In the West Indian area the problem [of child welfare] is mainly that of the destitute child, who is frequently illegitimate and lacks home care . . . It is probable that this problem has been aggravated by the economic consequences of the war. The problems of the West African territories centre round the drift of people to the coastal towns." Of Nigeria it has been reported, "the drift from the provinces has caused the breaking down of the old tribal traditions and discipline, and desertion and ill treatment of children is by no means uncommon". So far as non-self-governing territories are concerned, this process has been summarized for the General Assembly as follows:

"The progressive disintegration of the traditional social organization in other areas and growth of large urban agglomeration in some of them has necessitated in many cases specific measures for the protection of destitute and dependent children. In almost all areas, the presence of voluntary bodies engaged in charitable work, including child welfare, points to the existence of a widespread need." . . . Assistance to homeless and orphan children, in the form of orphanages and similar institutions is found practically everywhere; in many territories it constitutes the main or only form of public aid provided to both destitute and orphan children. In only a few territories has it been or is it being replaced by foster homes." 12

In many areas in process of development, attempts to meet the needs of homeless children by means of institutions are being made by non-governmental organizations, aided in many instances by government grants.

The need for part-time care

Another threat to the living standards of the child arises from the fact that the small two-generation type

12 Ibid., p. 40.

<sup>&</sup>lt;sup>10</sup> None of the figures cited here include such forms of aid as children's allowances, social insurance or social assistance.

<sup>&</sup>lt;sup>11</sup> United Nations document A/922, p. 35.

of family makes the child highly dependent on his mother's care and she may not be available. Various factors, including the inadequacy of the family income in a money economy, may impel the mother to take paid employment outside the home. This problem has little parallel in rural societies where there are likely to be many nearby relatives and where the mother works only in the home and garden and nearby fields. To widely varying degrees, the more-developed countries have recognized the existence of this need and have sought to meet it through such means as day nurseries and nursery schools to care for the pre-school child while his parents are at work. In most countries, the demand for such accommodations exceeds the supply. Several governments-notably those of France and the Union of Soviet Socialist Republics-have reported plans for considerable expansion. Other countries have left the problem chiefly to private action; the United States, for example, reporting "a lack of such services throughout the country", has stated that, in 1948, less than a tenth of its states and territories gave financial aid to day nurseries. The less-developed countries and territories usually support day nurseries and nursery schools only on a very small scale, if at all. The need, however, clearly exists in their more industrialized communities that have increasing numbers of women workers.

As school attendance is made compulsory and juvenile employment is forbidden or restricted, a need arises for an educative environment outside of school hours and during school vacations. On most aspects of this problem, little information is internationally available. It is known, however, that in some countries the desirablity of children's holiday camps has been widely recognized; for example, France sends 850,000 to camp each year; Italy, one million; and the USSR, 2,200,000 in 1947 and more since.

Children in their own homes with otherwise normal families may still be subject to neglect not only because of the absence of the mother, but also because of her illness or incapacity. Some countries are moving away from a past tendency to place such children in institutions, foster homes, or in some form of part-time care such as crèches, nurseries or foster day-care; instead they are increasingly providing some form of homehelp or mother substitute in the home.

Similarly, nutritional requirements of children inadequately met at home are progressively being recognized and met by systems of school meals, milk stations and supplementary feeding programmes outside the home. International assistance through UNICEF has played an important role in this respect.13

#### PROBLEMS OF PHYSICAL HANDICAP

The assessment of the number and needs of the physically handicapped in general is so difficult that even those countries with the most advanced services find it impossible to produce worth-while statistics except for limited and well-defined groups. The handicapped person is reluctant to declare himself handicapped unless he gains by so doing; this, in practice, means that only a country with comprehensive provision for the education of the handicapped, for their absorption into gainful occupation, and for assistance to them in cash or in kind, is likely to discover the majority of its handicapped citizens.

Exact definition is impossible. It is necessary to bear in mind not only the maimed but the deformed and the diseased with many gradations of disability. Physical defect, unless it makes all four limbs useless, reduces the range of a person's activities without necessarily handicapping its victim in all socially useful activities. Whether any physically defective person is, in practice, handicapped, and the extent to which he is handicapped, depends not only on the degree of his defect, but also upon the development and utilization of his abilities and upon the whole of his environment.

The crippled and the diseased tend to fare better where staple occupations demand skill rather than strength, and where a high proportion of occupations are sedentary. It follows, therefore, that physical defect is not synonymous with physical handicap; handicap exists only when the defect involved is of such a degree or character as to prevent a person from leading a successful life, unaided, in his existing social environment. It can and does happen that, in those very countries which, from the state of their social services, would be expected to be cognizant of a high proportion of their handicapped persons, living and working conditions are such that a considerable number of the physically defective are able to adjust themselves to life spontaneously, and so are not, in practice, handicapped.

Less highly industrialized countries have a lower incidence of handicap from such sources as industrial and traffic accidents, but a much higher incidence of handicap from disease. These considerations, combined with the greater difficulty already mentioned in the absorption of the physically handicapped into employment, probably justify an expectation of a higher incidence of effective handicap in such countries.

Some of the available statistics relate to the number of handicapped children served or needing service. Canada, for example, finds by medical examination that 1.8 per cent of school children have orthopaedic defects which may or may not prove to be handicaps;14 in England and Wales, about 0.8 per cent of the children of school age attend special schools for the physically handicapped;15 and it is estimated that at least 0.5 per cent of Italy's children are handicapped.16 In Puerto Rico there were 7,670 crippled children voluntarily registered in 1947-48 and in Hawaii, 2,482.

Other statistics relate to employment. For example, the United Kingdom requires every employer of twenty or more workers to employ at least 3 per cent of registered disabled persons, and maintains a registervoluntary and incomplete—on which are the names of about 4 per cent of the labour force. The Netherlands similarly requires every employer of fifty or more workers to reserve 2 per cent of posts to disabled

<sup>&</sup>lt;sup>13</sup> United Nations document E/2214.

<sup>14</sup> International Society for Welfare of Cripples, Programmes for the Physically Disabled.

<sup>15</sup> United Kingdom, Ministry of Education, Education in 1947, Cmd. 7426, pp. 54, 84.

16 Europe's Physically Handicapped Children, report by Dr.

Balme, United Nations document ST/SOA/Conf.2/1.

persons. In the United States it is estimated that persons who have ceased to be economically active, on account of total disability, amount to nearly 5 per cent of the economically active population, and that half of these are susceptible of rehabilitation.

Still other statistics concerning the incidence of handicap relate to the administration of income security in its various forms. For example, Sweden pays 150,000 invalidity pensions—equivalent to 2.7 per cent of its population aged 15 and over-under its national pensions act.17 France has 230,000 new recipients of invalidity pensions and chronic disease allowances each year.18 Egypt has planned special assistance on the assumption that 1.1 per cent of its population is totally and permanently incapacitated for work.19 Many countries also have reliable statistics concerning persons injured in industry and entitled to workmen's compensation, and concerning the war-disabled towards whom governments assume special responsibilities.20

Most of the estimates that have been cited include visual and auditory, as well as other kinds of physical defect, such as those resulting from tuberculosis, heart disease, poliomyelitis, spinal cord injury, amputations of upper and lower extremities, etc. Some of the estimates also include mental defects. These latter defects, which pose an increasingly grave problem in the industrialized societies, are not treated in detail because of the lack of common criteria in defining such defects, as well as the lack of systematic evidence on their prevalence and their handicapping effect in different parts of the world. Visual and auditory defects are dealt with separately below.

# Handicapped children

In general, the incidence of physical handicap among children is no better known than among adults. In some parts of the world handicapped children are singled out for special care and attention; in other places they are hidden or exploited. A few available statistics on incidence of handicap among children are given in different sections of this chapter as appropriate, but it must be realized that general knowledge regarding childhood handicaps caused by mass diseases, mental defects, etc., is extremely limited for most parts of the world today.

#### Blindness

The situation of blind persons differs greatly in different societies. In the least developed areas, they are inactive charges on their blood-relatives; in somewhat more-developed areas, as blind beggars, they evoke charity on the part of the community at large; and, in the economically most developed countries, govern-

17 ILO, op. cit., p. 14. 18 Revue de la sécurité sociale, November 1951. 19 H. Friis in United Nations document ST/G/TAA/Egypt/

mental and voluntary agencies are attempting to deal with the problem of blindness first by checking the physical causes of blindness, secondly by mitigating its economic effects through training and employment when physical prevention is not fully successful, and thirdly by providing supplementary or substitute incomes and welfare services when full economic self-support has not been achieved.

The first phase has been well described in a report published by a Member State:

"Where the system of family and group responsibility remains intact, as in most parts of Colonial Africa, the blind are ensured of food, shelter, clothing, and a position in society which is not disadvantageous by native standards. The relatives from whom the blind person may claim this relief, as a right, are prescribed exactly by custom and, though the limits of the extended family are defined differently by different tribes, they usually include remote relatives. If the need is beyond the family's power of alleviation, or if the whole family is in trouble, the duty devolves upon the clan. The relief is based on an exact knowledge of the blind person's resources and, though he will not usually be expected to support himself, the relief will be less in amount if he has a valuable herd or a wife who should work for him. An unmarried blind man will live with a relative and his family will usually endeavour to arrange a marriage for him. Blind women seldom marry, particularly in communities where the bride price system exists, though they may become concubines and bear children.

"In general, it appears true that, where the system of family and group responsibilities has not been disrupted by the impact of urban civilizations or alien cultures based on different principles of communal responsibility, the blind are sure of their basic subsistence, except in a time of general distress or where they alienate themselves from the group to which they belong.

"This system works excellently in a sheltered primitive community, but is inadequate in a changing modern world. The relief given merely covers bare animal necessities and leaves out of account the right of the blind individual to develop the faculties and interests of a normal human being. It condemns him to a life of inert dependency, in which no contribution from him is expected and from which regeneration is wellnigh impossible. Moreover, the system is necessarily limited in scope for, whilst a man honourably discharges responsibilities to his own blind relatives, he feels no responsibility for blind people outside his group. Divorced from his family, a blind person will often find himself amongst strangers who may consider him fair game for exploitation. Once that stage is reached—and in Africa, disintegration of the old system is spreading rapidly from the coasts and from the large towns—a new system of security must be substituted to fill the vacuum. Where the change in economy and culture is due to the impact of a different religion such as Mohammedanism and Christianity, that religion may graft upon the old system its own broader humanitarianism in which the com-

R.1.

20 Other estimates relate to the population at large. United Nations reports have cited such estimates as: Austria, 3.5 per cent war disabled (Dr. Rusk in United Nations document E/CN.5/L.1, 22 November 1949); China, at least 1.5 per cent disabled (UNICEF: Statement by representative of China); Poland, 2 per cent disabled persons known to the government (Puck leg etc.); and Virgolavia 31 per cent hardisoned (Dr. (Rusk, loc. cit.); and Yugoslavia, 3.1 per cent handicapped (Dr. Kessler in United Nations document ST/TAA/J/Yugo/L.1.). Compare other government estimates, such as France, 3.6 per cent handicapped (Informations sociales, 1 October 1951), and Sweden, 3.5 per cent with physical defects (ILO, op. cit., p. 14).

munity voluntarily accepts responsibility for its disabled."<sup>21</sup>

The second phase mentioned above is characterized by the emergence of a class of blind beggars in the large towns, in centres of detribalization, and in areas where the great religions have created an alms-giving public by extolling the virtues of charity. In many such areas, blind persons live with their families and join together in beggars' guilds which are the equal of other crafts: and they are believed to make a valuable contribution to the community's sense of religious obligation by evoking acts of charity. Of this phase, the same report has expressed the following views:

"The advantages of mendicancy from the blind beggar's point of view should not be underrated. He is his own master, normally obtaining an adequate income with very little effort. He lives in the open air amongst the cheerful companionship of the streets. . . . Little can be done for the confirmed adult beggar until the alms-giving public has come to realize . . . the greater advantages of contributing to organized charities, and until Homes and pension schemes for the incapable blind have been established. Amongst the younger generation, practical education, realistic training and a purposeful employment service may produce a type of blind person who will not beg. . . . Even if it were possible to prohibit begging and almsgiving, it would be unwise to do so at this stage. Alms-giving symbolizes the community's sense of responsibility for its disabled and, without that voluntary interest redirected into more constructive channels, a progressive system of blind welfare is impossible."22

The most modern phase is one in which between onehalf and four-fifths of the blindness occurring in the less-developed countries is recognized as being preventable. It is one also in which advantage can be taken of mechanical invention and of the expansion of services to train blind persons to make a significant contribution to the productivity of the economy and to the satisfaction of their own and their family's material and social needs. It is one, too, in which new social schemes have been developed for meeting the various needs of those who are incapacitated by blindness—contributory insurance and non-contributory pensions to prevent need; assistance in case of need; and welfare services to provide scope for the residual activities of the blind. In short, it has become practicable to break down the problem of blindness into a number of problems, each of which has to be solved in its own distinct way. Correspondingly, it becomes useful to think in terms of visual handicap rather than of blindness, and of different kinds and degrees of visual handicap, each of which calls for services appropriate to it. Moreover, as a range of services is opened up, a system of voluntary registration becomes necessary, and potential beneficiaries find it useful to register.

exemptions from direct taxation, the estimates may cover all who are unable to count the fingers of a hand at a distance of one metre (Trousseau's standard); they may relate to one eye or to both; or they may be limited to total blindness. A Government of India report, for example, states: "We can assume that for every totally blind person there is at least one partially blind, whose sight is so damaged that he cannot earn his living without the special assistance of blind welfare services. We feel justified, therefore, in believing that 250 per 100,000 represents the probable ratio of the totally blind, with a similar ratio of partially blind in need of welfare services, giving a total figure of 500 per 100,000 . . . "23 In a more-developed country, the definition may be expressed in economic terms, as in the United Kingdom National Assistance Act ("so blind as to be unable to perform any work for which eyesight is essential"), or in technical ophthalmological terms.

Estimates of the incidence of blindness are consider-

ably affected by the newer developments. Different definitions are used for different purposes. In a less-

developed country, where a survey is made of the need

for medical services, or where a count is made of

The services needed by a person adjudged to be blind do not necessarily involve economic assistance on grounds of need. For example, the United Kingdom (without Northern Ireland) has some 85,000 blind persons registered, but less than 60,000 receive pensions or allowances by reason of need; and the United States may have more than 250,000 blind persons, while giving federal aid to only 70,000 needy blind persons.<sup>24</sup>

Available statistics indicate that in Algeria, Egypt, Union of South Africa, Cyprus, India, and Pakistan the estimated incidence of blindness ranges between 250 and 500 per 100,000 population.25 In Libya, it is estimated at between 500 and 1,000. Postwar estimates of the incidence of blindness in Western countries range from 50 per 100,000 in the Netherlands to 175 per 100,000 in the United Kingdom and the United States. The difference between the less-developed and moredeveloped countries may be considerably greater than the above examples suggest. The latter have the more complete tallies. Furthermore, "the weight of blindness" is less in the latter countries, where it is mainly a contingency of advancing age, while in less-developed countries, a high proportion of the blind lose their sight in childhood.26 The real incidence of blindness would

<sup>&</sup>lt;sup>21</sup> Colonial Office, Blindness in British African and Middle East Territories, being the Report of a Joint Committee appointed by the Colonial Office and the National Institute for the Blind, following the visit of a delegation to Africa and certain British Middle East Territories between July 1946 and March 1947 (London, H.M. Stationery Office, 1948), paras. 24, 27, 28.

<sup>22</sup> Ibid., para. 32.

<sup>&</sup>lt;sup>23</sup> Government of India, Central Advisory Boards of Health and Education, Report on Blindness in India, 1944, Delhi, 1945.

<sup>&</sup>lt;sup>24</sup> Another 18,000 received blind pensions regardless of need in states without federally-supported plans. Some 20,000 blind persons are known to be gainfully employed and it is estimated that training facilities are available for the education and training of all blind children under public or private auspices.

training of all blind children under public or private auspices.

25 See, in addition to sources cited above, American Foundation for Overseas Blind and National Institute for the Blind, International Conference of Workers for the Blind, Oxford, 1949 (1950); reports of United Nations technical assistance experts; and, for earlier statistics, League of Nations, Report on the Welfare of the Blind in Various Countries, Geneva, 1929

<sup>&</sup>lt;sup>26</sup> In India the Government has estimated 181,146 blind under 20 years of age (Annual Report, 1949, p. 83). Reports indicate that in parts of Africa 370 per 100,000 children are blind. A survey by a competent committee considered that 75-80 per cent of the blindness was preventable. (Non-Self-Governing Territories. Summaries and analyses of information transmitted to the Secretary-General during 1950, United Nations document ST/TRI/SER.A/5/Add.2).

probably be a good negative indicator of the degree of general economic and social development. As one government stated in a report on blindness in its population: " . . . ignorance and the low standard of living form the fundamental reason for the extent of blindness . . ." It would seem, even when all possible reservations are made, that there are at least 6 million blind persons in the world today; that at least half of these need not have become blind; and that most of them could be helped by appropriate services to contribute to the raising of their own and their fellows' standards of living.

### Deafness

No country has yet given to the problem of deafness the same degree of attention as it has devoted to blindness, although there is reason for thinking that the deaf outnumber the blind.

Again, it is when services are provided that the most reliable statistics have been obtained concerning hearing handicaps. Thus, one country considers it good policy to reckon that, of every 100,000 children on the school roll, seventy are so deaf that they do not naturally acquire speech and language; at least 100 fail to make satisfactory progress in ordinary classes in ordinary schools; and between 200 and 900 need some help, such as individual hearing aids, tuition in lip-reading, or a favourable position in the classroom, if they are to make satisfactory progress in ordinary classes in ordinary schools.27 Another country agrees, substantially, in estimating that between 500 and 1,000 children per 100,000 have a handicapping hearing loss.28

The extent to which deafness becomes an employment handicap may well depend on the extent to which it is allowed to become an educational handicap. When one considers, however, that, in addition to those who have defective hearing while at school, there are those that lose their hearing later, it would not be surprising if 1 per cent of the population of working age needed, on grounds of defective hearing, some type of special preemployment service, ranging from selective placement to extensive rehabilitation.29

#### Problems of old age<sup>30</sup>

In pre-industrial rural areas, society has traditionally made provision for the relatively small numbers of people who reach old age, usually according them a position of honour and leadership in the community and of security in the household. In the industrially

<sup>27</sup> United Kingdom, Scottish Education Department, Advisory Council on Education in Scotland, Pupils Who Are Defective

Council on Education in Scotland, Pupils Who Are Defective in Hearing, Cmd. 7866, Edinburgh, 1950.

<sup>28</sup> A. J. Lesser, Services for the Child Who Is Hard of Hearing—A Guide for the Development of Programs, Children's Bureau No. 334, Washington, 1949.

<sup>29</sup> ILO, Training and Employment of Disabled Persons, Montreal, 1945, p. 16, citing United States Public Health Survey, 1942; Lord Beveridge, Voluntary Action, London, 1948, reckoning the congenitally deaf at 100 and the adventiously deaf at 300-400 per 100 000 in the United Kingdom

1948, reckoning the congenitally deaf at 100 and the adventitiously deaf at 300-400 per 100,000 in the United Kingdom without counting the hard of hearing.

30 Cf. Welfare of the Aged—Old Age Rights, United Nations document E/CN.5/200/Add.1, 1950, and Methods of Administering Assistance to the Needy, United Nations document E/CN.5/273, 1952; International Gerontological Congress, St. Louis, 1951, paper entitled "International Programme for the Welfare of the Aged."

developed countries, on the other hand, because of increasing life expectancies, a growing proportion of the population consists of senior citizens who have ceased to engage in remunerative work, and who must be supported by the gainfully-occupied part of the population by means of annuities, pensions, social insurance benefits, or public-assistance allowances, if not by the earnings of other members of their families. Many are without inherited family property and have no savings - often because they have expended so much of their income providing for the welfare and opportunities of their children. But their children, in turn, as adults, feel similar obligations to their own offspring, thus leaving little for the grandparents, to say nothing of the great-grandparents. The process of economic development has resulted, in short, in the emergence of wide sections of the population who do not share, in their later years, in the material prosperity which they have helped to create—unless positive measures are taken for their welfare by society at large.

In this situation, the most widespread and most pressing need is usually for income. Compulsory old-age insurance has been introduced in more than thirty countries: a pension is assured to the covered population—usually specified categories of persons who have been in paid employment or in gainful occupations provided a specified number of contributions have been credited to their individual accounts. For example, more than 25 per cent of the population over 65 are beneficiaries in France, 40 per cent in the United Kingdom, and 25 per cent in the United States.31 Another measure, permitted or encouraged by a few governments, rests on collective bargaining contracts which guarantee to trade-union members employed by signatory concerns, certain minimum cash benefits in old age. A third, extended to all citizens, is the basic old-age pension provided regardless of need and without insurance contributions, as in Canada (from age 70), New Zealand (65) and Sweden (67). All of these measures are directed towards prevention of need. A fourth type of measure is directed towards meeting need when it arises. Not only have a score of countries developed systems of mandatory general assistance for all who are adjudged to be in need (as has been shown above), but also within the past fifty years a score of countries (including some, like France, which do not practise general assistance) have developed systems of special assistance for needy old people—for example, 51 per cent of the population aged 65 and over are beneficiaries in Australia, 44 per cent of those over 60 in Denmark, 58 per cent over 65 in France, 8 per cent in the United Kingdom, and 22 per cent in the United

Of non-cash needs, the most pressing is that for care and attention—it is not yet clear to what extent this need can be reduced by attention to elderly persons in their own homes. Denmark accommodates about 7 per cent of its old-age pensioners in public and private old

<sup>31</sup> A distinction should be made between those who are current beneficiaries in any country and those who are "covered" under recent legislation and who will benefit when they reach retirement age, provided they satisfy all qualifying conditions. Thus, in the United States approximately 87 per cent of paid civilian employees are now "covered" by recent changes in legislation (United Nations document E/CN.5/SR.195).

people's homes, with shortage of accommodation in some rural areas more than counterbalanced by incomplete utilization in localities which have provided special low-cost housing for old-age pensioners; Finland, 5 per cent of its population over 65; France, 2 per cent over 65, but with long waiting lists taken as an indication of the need for the creation of more institutions; Switzerland, 4 per cent of its population over 65; United Kingdom 1.4 per cent of those of pensionable age; United States, 4 per cent of old people, well over half of whom are in private boarding or nursing homes.

It is becoming apparent, however, that the situation of the aged in industrialized countries constitutes a problem that may be modified but not solved by giving prime attention to cash income and congregate care. Governments in these countries have increasingly found it necessary to take the aged into special account when developing policies in diverse fields, such as housing policies, hospital policies, policies for physical and mental health, manpower policies, etc. There has, in short, been a widening of government concern for the welfare of the aged and a groping towards an integrated approach to this problem.

While the industrially more-developed countries have been increasingly faced with the problem of helping old people who are left alone because their children have moved elsewhere to work and establish homes, rather than of helping the family to meet the needs of its older members, it is, of course, by no means certain that the now underdeveloped countries will, in the course of their development, face problems in exactly this way. Thus, it is even possible that twentieth century technology may enable them, if they wish, to develop a different pattern of location of industry, a different kind of housing, and a different set of sources of livelihood, from those which were evolved under the technologies of the nineteenth century, and therewith to preserve something more akin to their traditional type of family and social system.

#### REFUGEES AND DISPLACED PERSONS

The Second World War and subsequent political upheavals greatly increased the size of still another special problem group—refugees and displaced persons.<sup>32</sup> The problem of refugees and displaced persons is as old as organized human society, but it has taken on special significance in the twentieth century. Its importance in the social, economic and ideological problems of our time relates to its scale and intractability, on the one hand, and the recognition of aspects of the problem as an international responsibility, on the other.

During and after the war, the existing situation was vastly aggravated. In Europe and Asia, millions of people were moved from their homes either to make room for other ethnic groups or to provide forced labour. Other millions fled from theatres of military operations or occupation.

Of the estimated 6 million refugees and displaced persons in Europe at the end of the war, over 5 mil-

lions were repatriated, but endeavours to repatriate others proved to be unsuccessful, primarily because of political factors. In addition, there has been a constant stream of persons who have crossed European borders, chiefly into Western Germany. From these groups, over one million persons have been resettled by the International Refugee Organization.

In certain European and Asiatic countries, the war and its aftermath produced large numbers of persons displaced within those countries. For example, in Greece, 600,000 persons were made homeless by the civil war (which broke out in 1944) and thus became a burden on a State without adequate conditions or resources for resettlement of such persons.

Meanwhile, beginning in 1947, political upheavals created new masses of refugees in Asia. Following the partition of the Indian subcontinent, approximately 9 million refugees moved from India into Pakistan and about 5 million from Pakistan into India. (The majority have now been successfully resettled in the two countries).

In 1948, war in Palestine resulted in the dispersion of about a million Arab refugees through neighbouring areas in the Middle East. Most of these have been without any means of subsistence and almost 900,000 have continued to receive relief through United Nations agencies. War in Korea has resulted in 4½ million refugees and displaced persons now in South Korea alone, about 720,000 being refugees from North Korea (50,000—60,000 children in South Korea have been orphaned, over 400,000 houses totally destroyed and 200,000 more than 50 per cent destroyed).33

The problems confronting the different groups of refugees themselves and the countries of origin, temporary residence or permanent settlement, have naturally varied greatly. For some groups, the elementary problem of subsistence, of minimum shelter and clothing, still predominates. For others, problems of another order which are often interrelated—psychological, social, economic and legal—have come to the fore. The uprooted persons are affected psychologically by their separation from their normal communities and often from their families, by life in camps, by the disabilities they suffer in a strange land from enforced idleness, by uncertainty as to their future destination, by fear of new violence and persecution.

Among the social problems may be mentioned the plight of refugee children and above all the tragic cases of children whose parents died during the war or were never reunited. Another especially vulnerable group are the aged and the handicapped who encounter special obstacles to resettlement or to becoming full members of their new communities. At least a partial solution of the problems of such groups in Europe has been reached through the activities of the International Refugee Organization and the generous efforts of certain governments and voluntary agencies. In accordance with a policy encouraged by the IRO, many of the aged and some of the handicapped have been resettled with their families; others, particularly the handicapped, are being given institutional care with the aid of grants from the IRO.

<sup>&</sup>lt;sup>32</sup> A first comprehensive survey of the problem is now being undertaken, at the initiative of the United Nations High Commissioner for Refugees, and with the financial assistance of the Rockefeller Foundation, by a group of experts under Professor Jacques Vernant.

<sup>&</sup>lt;sup>33</sup> Information as of early 1952 transmitted by the United Nations Korean Reconstruction Agency.

For the able-bodied and employable members of the refugee groups, the economic problem of earning a livelihood is not easy. Before resettlement there are seldom proper employment opportunities for them, and after resettlement they often require retraining and special help to find opportunities in the new countries. The situation is especially difficult for intellectuals and members of the medical or legal professions who often find doors barred to their practice of their profession in a new country.<sup>34</sup>

Apart from the material disabilities which are common to refugees, one of their disadvantages is the fact that they are aliens without consular or diplomatic protection. They are often unable to obtain documents required for exercise of various rights, such as birth certificates, marriage certificates, documents of identification, travel documents, documents certifying their professional qualifications, etc., which are normally furnished to aliens by their consuls or national authorities. Moreover, refugees frequently lack the right to work and the right to various national benefits in respect of rationing, elementary education, public relief and assistance, social security, etc. In addition to these handicaps, the danger of expulsion from the country in which they have taken refuge often hangs over their heads. These and similar handicaps are closely connected with the problem of statelessness which was already acute before the Second World War and towards the solution of which international efforts continue to be directed.

The degree of responsibility assumed by the international community on behalf of displaced persons and refugees in Europe, the Middle East and Korea, has been on a scale previously unknown. Actual material assistance, both for care and maintenance and for repatriation and resettlement, has been given to the various refugee groups by the United Nations Relief and Rehabilitation Administration, the International Refugee Organization, the United Nations Relief and Works Agency for Palestine Refugees in the Near East, and the United Nations Korean Reconstruction Agency; and a fund for material assistance has recently been authorized under the High Commissioner for Refugees. Latterly, the responsibility for the legal protection of refugees throughout the world, which had previously devolved upon the IRO, has been placed upon the United Nations High Commissioner for Refugees.

#### Conclusion

As we have seen, special problems of diverse nature give rise to the need for special services in all societies,

but the criteria for assessing these needs and the provisions for meeting them differ widely. In countries with a high degree of economic development, the responsibility has increasingly fallen on the whole nation acting through the power of government and through voluntary organizations. In such countries, general levels of living are relatively high, and considerable resources can be devoted to ensuring that no individual falls below a given minimum. There is increasing emphasis on preventive measures designed to reduce the incidence of special needs and handicaps; at the same time, however, the responsibilities for the support of certain groups—particularly the young and the aged—are shared by larger and larger units of society.

Many millions of people still live in subsistence economies in which it is the responsibility of the extended family to meet any special needs of its members, with the State intervening only when disasters overwhelm whole communities. In other more complex societies, religious obligations are expected to motivate the individual to relieve the needs of others. In societies in process of rapid social and economic change, traditional systems become increasingly inadequate, and eventually the State and other large social units tend to intervene—first to relieve the most extreme forms of destitution, then to develop general systems of social security, relief and services.

Advanced conceptions of public social responsibility are often found in the policies and legislation of countries in which, however, low national income levels, low productivity, inadequate government resources, and lack of experienced personnel prevent the newer types of social institutions from dealing with more than a fraction of existing needs.

Improvement in the level of economic development does not necessarily assure a decline in the contingencies here discussed. Actually they may increase as a by-product of social and economic change. As the peoples of the modern world, in their normal life, become affected by and dependent upon wider and wider circles of their fellow men, so they become increasingly dependent on those wider circles to meet the hazards and accidents of life.

Acceptance of responsibility for the alleviation of distress has, during recent decades, begun to extend beyond the national community to the international or world community. Not only have governments used international organizations to help them develop their social policies, but also the international community has assumed responsibility for refugees and other persons rendered destitute by wars, political upheavals, and natural catastrophes, and for the most pressing needs of the more helpless members of the human family.

<sup>&</sup>lt;sup>34</sup> Migration (which is widely considered to be one of the most hopeful solutions to refugee problems) is discussed in some detail in chapter VII of this report.

# Chapter IX

### GENERAL LEVELS OF INCOME AND WELFARE

#### Introduction

In the preceding chapters of this report, various factors have been considered that enter into a person's standard of living<sup>1</sup>—health, nutrition, housing, education, conditions of work and employment, as well as problems of need among special groups. The question arises as to whether there is a single, over-all measure that will reflect in quantitative terms what people mean when they speak of a "high" or "low" standard of living. Such a measure might conceivably be a "weighted index" which would combine in a single quantitative expression estimates for different factors. No such weighted index usable on an international scale does exist at the present time. The problem has hardly been faced internationally as to how the different factors should be weighted, or, indeed, as to exactly what factors should be included in a general measure of standards of living. There are outstanding cultural differences affecting these points. In fact, the theoretical feasibility of such an index is open to question.

While a single comprehensive direct measure of standards of living is lacking, several indirect indications are frequently taken as good approximations. Wages are thus considered a significant indication of standards of living of different wage-earners within a country at a given time, but for temporal comparisons, they do not take account of changes of prices of goods. "Real wages" take price changes into account but do not permit international comparisons of absolute levels, since they use a purely local or national base (comparing the quantity of a fixed "basket of goods" that a given wage will purchase today with what it would purchase, say, ten years ago in the same area). For international comparisons, various methods have been used to set up an index that will reflect the purchasing power of different income groups in terms of the amount of selected goods (food, clothing, housing, etc.) that can be bought with an hour's or a day's labour. Such an approach, however, does not always reflect different geographically and culturally determined needs and values, nor does it usually take account of differences in public services; obviously, the availability or non-availability of free education and of health or other services makes a considerable difference in standards of living, other things being equal. Most important, however, is the fact that a large proportion of the working people of the world do not actually receive any wages, salaries or other monetary income at all; or only a part of their income is in the form of money. The subsistence farmer who consumes what he produces thus falls outside the scope of such an index.

One proposed answer to this situation is to give a money value to what an individual receives (food, shelter, etc.) when money itself is not received. How-

<sup>1</sup> See comment on page 2 regarding the ambiguity of meaning of the concept "standards of living".

ever, apart from difficulties involved in applying to a rural subsistence economy the yardsticks of a market economy, there are serious practical difficulties in financing a direct, person-by-person (or family-by-family) inquiry into the total monetary and/or non-monetary income of every economically active member of the population. A more feasible approach is to study a "representative sample" of this population. Several such studies have been made but information on rural subsistence economies is fragmentary to date.<sup>2</sup>

#### NATIONAL INCOME PER CAPITA

A general measure that is frequently considered to be an index of standards of living is the "national income per capita", which is national income divided by total population; it will be referred to as "per capita income". This measure takes non-monetary income of subsistence economies into some account in the sense that it includes, *inter alia*, an estimate of the value of total agricultural production, whether marketed or not. Government social services are also usually included.

In international studies of income, however, serious problems of comparability arise. Different countries currently use different definitions. For example, the Soviet Union and a number of Eastern European countries differ from most other countries in that their national income accounting is limited in the main to the production of material goods and to services closely related to such production. This concept excludes services performed by doctors, teachers, and domestic servants, the transport of passengers and certain government services. In many less-developed countries, only the most fragamentary data exist on which to make any kind of estimate of income. In every attempt at international comparison, difficult technical problems arise as to how to convert different money systems into a common scale and how to compare the values of goods and services produced in different countries.4

National income figures and related figures have proved increasingly valuable for describing economic structure and production, and changes therein. The

<sup>4</sup> For a fuller discussion, see United Nations, Statistical Office, National and Per Capita Income in Seventy Countries, 1949, Statistical Papers, Series E, no. 1, New York, 1950.

<sup>&</sup>lt;sup>2</sup> United Nations, Enquiries into Household Standards of Living in Less-Developed Areas, Department of Social Affairs, New York, 1951. For a brief description of more recent developments in this field, notably in India, see current issues of Sample Surveys of Current Interest, Statistical Papers, Series C, Statistical Office of the United Nations.

<sup>3</sup> "National income is a measure of the aggregate net output

<sup>&</sup>lt;sup>3</sup> "National income is a measure of the aggregate net output of goods and services which become available for consumption or capital formation in a given period." United Nations, Statistical Office, National Income Statistics, 1938-1948, p. 8. For a detailed discussion of the concepts involved and the methods of measurement employed, see also United Nations, Measurement of National Income and Construction of Social Accounts, Geneva, 1947.

nature and extent of the relation of national income figures to social welfare has not as yet been clearly established. Per capita income was not devised to measure, and does not directly measure, the welfare conditions of individuals (health, diet, housing, etc.). Its relation is inferential. Any attempt to assess social welfare or standards of living in different countries on the basis of national income statistics runs into the following problems:

- (1) Like all measures expressed in terms of money, income statistics necessarily will not take account of those factors affecting human welfare that cannot be given a precise monetary equivalent. Furthermore, they will not indicate the efforts, strains and hardships that may be involved in achieving a given income, nor certain undesirable consequences that may attend an increase of production and income (smoke, noise, social maladjustment, etc.)
- (2) One set of natural circumstances may demand more effort, more production, and therefore higher national income, than another set of natural circumstances in order for a society to achieve the same degree of satisfaction of basic needs, because of differences in climate, terrain, bounty of nature, etc.
- (3) The very same product may be given quite different values in national income accounting, because of differences in the relative price structure of the local market; yet a product like milk or cheese or other basic food has much the same nutritional value everywhere, regardless of price. The value of farm products is based on prices received by the farmer, which may be very low, particularly if transportation is bad and the middleman's profits high. The farmer who lives in such an area and is largely self-sufficient, consuming his own products, will have a very low income attributed to him, although it might require a sizable income for a city-dweller to buy and consume the same products. (On the other hand, it would obviously be quite misleading to evaluate all commodities and services equally everywhere. The production of heat and the production of ice, for example, have entirely different values for individuals in tropical and in subarctic climates.)
- (4) While an attempt is made in income statistics to estimate agricultural production for home consumption (subsistence agriculture), in practically all other cases productive labour at home for self-consumption is not added to national income because of obvious statistical difficulties. Thus, no account is taken of the values created by the labour of the housewife, of the man who repairs his own home and furnishings, of the family that makes its own clothing, etc. While governmental social services are usually included, unpaid social services provided by the local community or kinship group are not. Similarly, recreation that is purchased is computed, but not local or home entertainment, fiestas, noncommercial sports and games, etc.

This situation makes it difficult to compare absolute income figures of less-developed countries with those of more-developed countries from a point of view of welfare. At the same time, apart from the rental value of houses, "services" received from the use of durable

consumption goods, such as automobiles and household appliances, are excluded from national income, and this may in turn underestimate the level of welfare achieved in the more industrialized countries.

- (5) Some of the items included in national income figures do not contribute in any direct sense to social welfare. The production of war materials may be considered in this light. In general, capital goods, which are evaluated in national income estimates together with consumers' goods, do not themselves add to the immediate welfare of the consumers, although they may be important or necessary means for future improvement of consumption. Furthermore, certain items, such as commuting by urban workers, elaborate legal services and advertising, are, by and large, overhead costs for the maintenance of a complicated market economy and do not contribute directly to welfare in themselves (in addition to other items already counted in national income).
- (6) The level of welfare cannot be considered to correspond proportionally to the level of income and consumption expenditure. At the higher levels of income, a considerable amount of expenditure is for less essential or luxury goods and services, while at the lower levels, expenditure is more for goods and services that contribute most directly to basic welfare (an additional argument can be made that welfare is a function of the relationship between the level of aspiration and the attained level of living. This approach would, however, essentially deny the validity of international standards of welfare, and could serve to justify extremely low levels of living).
- (7) Per capita income, being an average obtained by dividing the national income by the total population, does not take account of the great disparity that may exist in the distribution of income. A related problem is raised by the fact that populations differ widely in age composition and correspondingly in consumption needs, one having many more adults in relation to children than another, but the per capita figures do not take this into account.

Once these reservations are fully understood, available statistics on income may nevertheless be used for limited purposes in providing important background information relevant to social welfare conditions. Thus, while the absolute size of the per capita income will not correspond to the level of social welfare or the standard of living, a very low income level clearly indicates material want. Furthermore, within the same country, a rise or decline in per capita income strongly suggests a change in living conditions (provided that the trend is not occasioned largely by changes in such factors as war production).

#### Levels of per capita income

Table I shows seventy-five countries and territories grouped according to the size of per capita income in 1950 in US dollars. The figures are from official or semi-official sources or estimates based on these sources. For a number of countries, mainly in the low income groups, where such data are not available they are

 $Table\ I$  countries classified by size of per capita income in 1950 showing regional divisions

| Per capita<br>incomes in<br>US dollars | Africa  | Middle<br>East  | Asia   | Europe<br>(including<br>USSR)  | Northern<br>America    | Latin<br>America   | Oceania                  |
|--|---|---|--|--|------------------------|--|--------------------------|
| 1,000 and<br>above<br>600-999          |   |   |  | Belgium<br>Denmark<br>Norway<br>Sweden<br>Switzerland<br>United Kingdom  | United State<br>Canada | s  | Australia<br>New Zealand |
| 450-599                                | ••  |   |  | France<br>Luxembourg<br>Netherlands                                      |                        |  |                          |
| 300-449                                |   | Israel  |  | Czechoslovakia<br>Finland<br>Germany (West)<br>Ireland<br>Poland<br>USSR |                        | Argentina<br>Cuba<br>Puerto Rico<br>Uruguay<br>Venezuela                       |                          |
| <b>15</b> 0-299                        | Union of<br>South Africa  |   | Malaya   | Austria<br>Hungary<br>Italy<br>Portugal<br>Yugoslavia                    |                        | Chile<br>Jamaica<br>Panama   |                          |
| 100-149                                | Rhodesia<br>(South)   | Egypt<br>Lebanon<br>Syria<br>Turkey                     | Japan<br>Philippines   | Greece   |                        | Brazil<br>Colombia<br>Costa Rica<br>El Salvador<br>Mexico<br>Nicaragua<br>Peru |                          |
| 3elow 100                              | Belgian Congo Ethiopia Kenya Liberia Nyasaland Rhodesia (North) | Afghanistan<br>Iran<br>Iraq<br>Saudi<br>Arabia<br>Yemen | Burma<br>Ceylon<br>China<br>India<br>Indonesia<br>Pakistan<br>Thailand |  |                        | Bolivia Dominican Republic Ecuador Guatemala Haiti Honduras Paraguay           |                          |

estimated or assumed by the Statistical Office of the United Nations.<sup>5</sup>

It may be noted that in most of the Asian, Middle Eastern and African countries, per capita income was below 100 US dollars. The concentration in lower income levels of most Latin-American countries can also be readily observed. These stood in marked contrast to the incomes of the highly industrialized countries.

tries of Western and Northwestern Europe, Northern America and Oceania.

On a regional basis, Asia (not including the Middle East), with approximately half of the world's population, produced but 10 per cent of the world's income in 1950; 7.5 per cent of the world's population in Africa accounted for a little over 2 per cent of the world's income; 4 per cent of the world's population in the Middle East had 1.5 per cent of the world's income; and almost 7 per cent of the world's population in Latin America obtained about 4.5 per cent of the world's income. On the other hand, less than 7 per cent of the world's population in Northern America (Canada and the United States) produced almost 43 per cent of the world's population in Europe; USSR and Oceania accounted for almost 40 per cent of the world's income.<sup>6</sup>

While the above figures are admittedly crude, they give an unmistakable picture of the great divergence in level of income among different countries and show

<sup>&</sup>lt;sup>5</sup> As to the method of conversion from national currencies into 1950 US dollars, for many countries prewar exchange rates have been used and adjusted for changes in the purchasing power of the currencies concerned. In other cases, conversion has been made at the exchange rates prevailing in 1950. Prewar exchange rates have been used in preference to current rates where neither the controlled official rates nor the free market rates of 1950 seemed to reflect purchasing power parities. On the other hand, the use of prewar rates, which were considered to be normal, often results in an underestimation of the national income of less-developed countries, since the prices of foodstuffs, among other things, are usually lower in these areas than in developed areas converted at that rate. Moreover, appropriate price indices for adjusting changes in the purchasing power of the currencies since the prewar period are often difficult to find.

<sup>&</sup>lt;sup>6</sup> Data are supplied by the United Nations Statistical Office.

that the majority of the peoples of the world live on extremely low incomes. The general picture would not be altered even if the incomes of the less-developed countries were revised upwards by say 100 or 200 per cent.

It is also evident that the general picture has not changed appreciably since prewar days. Indeed, as shown by changes in per capita income at constant prices, there is no indication that the poorer countries have been improving faster than the richer.

Per capita incomes at constant prices, in comparison with prewar incomes, had increased over 40 per cent by 1950 in a number of countries (including the United States, Canada, USSR, Poland, Czechoslovakia and Puerto Rico). Most countries of Europe, including those most affected by the war (with the exception of Greece) had higher per capita incomes at constant prices in 1950 and 1951 than in the prewar period. Per capita incomes at constant prices in Latin-American countries for which data are available for the same period also surpassed the prewar level. (In both Europe and the Americas increases in industrial production were generally much greater than in agricultural production, which in some cases was still below the prewar level.)8 But many of the Far Eastern countries had not fully recovered prewar levels by 1950. Ceylon was an outstanding exception. The decline of national income at constant prices in the case of Burma was particularly striking. Japan, which also suffered a severe drop of income in the immediate postwar years, has, however, made a remarkable recovery. Those parts of Africa having income estimates (including Union of South Africa, the Rhodesias, Nyasaland, and the Belgian Congo) registered, in general, gains in per capita incomes over the prewar level. Information concerning the Middle East is largely lacking (estimates for Turkey indicate higher per capita incomes currently than prevailed before the Second World War). While recent increases in sales and royalties in most of the oil-producing countries in this region have no doubt contributed to the size of incomes, it must be recalled that per capita agricultural production, which is the mainstay of the great majority of the population in the region, has declined slightly.9

Preliminary information where available on the developments in 1951 and 1952 indicates continued expansion of income or at least a sustained level for most countries in line with developments noted above, although prewar levels had still not been reached in some cases. On the other hand, an increasing proportion of national income was absorbed by military expenditures in a number of the more-developed countries.

#### DISTRIBUTION OF INCOME WITHIN COUNTRIES

To a greater or less extent the distribution of income within countries is unequal in all parts of the world; it is particularly so in areas where there are rigid ethnic or class barriers. However, a levelling process appears, on the whole, to have been working in more-developed countries, bringing about a more equal distribution of income among different social groups. Available evidence also suggests that the distribution of income within the poorer, less-developed countries is, at present, generally more uneven than in the economically developed countries; the wealthy few in the poorer countries enjoy a larger proportion of the total income.

Figures on the actual distribution of income by size in different countries are incomplete and difficult to compare. They differ with regard to the definition of income and income recipients (for example, income may refer to money income alone or to income in kind as well; income recipients may refer to individuals, families or taxpayers). Data based on income-tax returns, payrolls or social security schemes cover only a small portion of the population in many less-developed countries. The reliability of such data is further impaired by the tendency to conceal income in order to reduce or avoid taxes. Available figures for a few countries, nevertheless, do suggest that the richest fraction of the population (the richest tenth, fifth, half, twentieth, etc.) generally receive a greater proportion of the total income in the less-developed than in the more-developed countries. Thus, in the case of such high-income countries as Canada, Denmark, Sweden, United Kingdom and United States, the richest tenth of the population received in recent years around 30 per cent of total income, while in several less-developed countries the richest tenth received up to 40 per cent or more of total income. In Colombia in 1947, approximately 30 per cent of the total income was received by only 2.6 per cent of the income recipients. 10 Conversely, the lower income groups (e.g., the poorest half) tend to receive a higher proportion of the total income in more-developed countries than in less-developed countries.

Furthermore, a declining trend of income concentration is observable in a number of developed countries. In the United States, for example, the richest tenth, which received 30 per cent of the total income in 1949 (before income taxes), had received 37 per cent in 1935-36; in the United Kingdom, this group, which received 26.3 per cent of the income (after income taxes) in 1947-48, had received 34.8 per cent in 1938-39.

The figures in table II, while not entirely comparable, indicate in a few countries the proportion of the total income received by the top 10 per cent income group, and the proportion received by the poorest half.<sup>11</sup>

<sup>&</sup>lt;sup>7</sup> That is, per capita income valued at the prices of a base period, usually prewar. The price indices used for actual adjustment (deflation), however, differ widely in different countries.

<sup>8</sup> See chapter IV.

<sup>9</sup> See table I, chapter IV.

<sup>&</sup>lt;sup>10</sup> The Basis of a Development Program for Colombia, International Bank for Reconstruction and Development, Washington, D.C., 1950, p. 35.

<sup>&</sup>lt;sup>11</sup> Data for a number of other high-income countries are available or can readily be calculated. For other low-income countries, rough estimates have also been made. Some of the latter figures conform to the general pattern, others do not; they are not included in the table because they are of more questionable reliability. If they were included, although there would be more exceptions, the general picture would not be altered.

Table II

|                                       | Per cent of total income received by the richest tenth |                    | income re                 | t of total<br>ceived by<br>est half |
|---------------------------------------|--|--------------------|---------------------------|-------------------------------------|
|                                       | Before<br>income<br>taxes                              | After income taxes | Before<br>income<br>taxes | After income taxes                  |
| Ceylon <sup>a</sup> 1950              | 33.3   |                    | 21.4                      |                                     |
| El Salvador <sup>a</sup> 1946         | 43.6   |                    | 26                        |                                     |
| Puerto Rico <sup>a</sup> 1946-47      | 40.8   |                    | 16.4                      |                                     |
| Italy <sup>a</sup> 1948               | 34.1   |                    | 23.3                      |                                     |
| Denmark <sup>b</sup> 1949             |  | 29.4               |                           | 22.7                                |
| United Kingdom <sup>e</sup> . 1947-48 | 32   | 26                 | 26                        | 30                                  |
| Sweden <sup>d</sup> 1949              | 29   |                    | 27                        |                                     |
| Canada* 1949                          | 28   | 26                 | 26                        | 27                                  |
| United States <sup>r</sup> 1949       | 30   | 28                 | 23                        | 24                                  |
| Netherlands <sup>a</sup> 1938         | 34.7   |                    | 22.5                      |                                     |
| United Kingdom <sup>e</sup> . 1938-39 |  | 34.8               |                           | 26.8                                |
| United States <sup>e</sup> 1935-36    | 37   |                    | 21                        |                                     |

Sources: Figures for Puerto Rico, Italy, Denmark and United States (1949) are derived from data given in Statistical Papers, Series E, No. 3; for Ceylon, computed from data given in "An estimate of inequality of income", Bulletin of Central Bank of Ceylon, March 1952, pp. 9-11; for El Salvador, computed from Henry C. Wallich and John H. Adler, Public Finance in a Developing Country, Harvard University Press, 1951, p. 26 (more recent estimates in El Salvador, not yet published, have indicated an even greater degree of inequality of distribution of income); for the United Kingdom, computed from estimates based on Inland Revenue Reports by E. C. Rhodes, "Distribution of Incomes in the United Kingdom in 1938 and 1947", Economica, May 1950, pp. 150-154; for Sweden, from Statistisk Arsbok för Sverige 1951, p. 317; for Canada, from Taxation Statistics, Department of National Revenue, Ottawa, 1951, pp. 112-113; for United States (1935-36), from United States National Resources Committee, Consumer Incomes in the United States, 1935-36, Washington, 1939, p. 138; for Netherlands, from J. B. D. Derksen, "Statistical Evaluation of the Distribution of Family Incomes", Maandschrift, Netherlands Central Bureau of Statistics, 1944, pp. 287-296.

\* Income units are families.

<sup>e</sup> Income units are individuals filing income-tax returns. A married couple is, for income-tax purposes, counted as one individual.

d Income units are individual income-tax returns.

• Income units are total income-tax returns, including those whose incomes fall below the tax limits. Income after income taxes refers to income minus declared payable tax.

f Income units are spending units consisting of all persons related by blood, marriage or adoption who live together to pool their incomes for major items of expense. Non-money income is not included.

\* Income units are families and individuals.

Other evidence supports the indication. Thus, the gap between the income of professional and semi-professional personnel, on the one hand, and ordinary workers, on the other hand, appears appreciably wider in less-developed countries. The income of the former sometimes approaches the income of similar groups in more-developed countries, but not the income of the latter. Where "salary earners" are distinguished from "wage earners" in income statistics, their average income in the less-developed countries tends to be several times greater than that of the wage-earners (sometimes as much as twelve times greater); in more-

developed countries, the ratio appears less than two to one.12

While urban incomes are generally higher than rural incomes, the gap tends to be narrower in moredeveloped countries. Even within urban-type labour, there seems to be a greater wage discrepancy between skilled and unskilled workers in the less-developed countries than in the more-developed. Thus, in building construction, for example, the pay of unskilled labour in the cities of less-developed areas appears to be 60 per cent or less of the pay of carpenters, while in most of the developed countries the ratio exceeds 80 per cent.13 Similar patterns of difference are found in the ratio of skilled to unskilled wages in other fields, such as electricity. In recent years, furthermore, there has been a general tendency in more-developed countries for the disparity in the remuneration of the skilled and the unskilled, the manual and the non-manual, men and women, to decrease.14 Higher levels of employment may partly account for this trend, along with such factors as the greater spread of education and technical training, greater social mobility, growth of unionism (but to a much smaller extent among white-collar workers), minimum wage legislation, etc. In some Eastern European countries, deliberate national policies have been responsible for shifts in relative wage scales.

This levelling process, in several of the developed countries at least, has been facilitated by the over-all increase of national income, and has been achieved, not so much by reductions of incomes of the relatively rich as by the faster growth of incomes of the relatively poor. Moreover, the spread of industrialization, instead of creating a large mass of low-paid unskilled workers, as sometimes feared, appears—in the long run—to have provided more opportunities for the higher-paid types of work, such as professional, technical or commercial work. There has thus been a gradual increase in the proportion of workers engaged in higher-paid employment.

Disparities of income in less-developed areas are consistent with a number of other frequently-observed conditions: concentration of land ownership in the hands of a small upper-class minority; high rents, high shares of crops to landowners, and high interest rates; a large surplus of cheap, unskilled labour (often including child labour) competing for work; extreme educational and cultural differences, with a small, well-educated, city-dwelling minority (native or foreign) following one set of standards, and an illiterate peasantry living in a quite different world; etc.

Some of the factors that have been responsible for the levelling of incomes in the developed countries are apparently also working in certain less-developed areas where basic socio-economic change is taking place.

To the extent that the government is financed through "progressive taxes" and provides services in social fields, such as education, health and housing, then governmental revenues and expenditures have the effect of

b Income units are individual income-tax returns. The returns are filed by all persons receiving incomes, including those whose incomes fall below the tax limits.

<sup>&</sup>lt;sup>12</sup> United Nations, National Income and Its Distribution in Under-Developed Countries, Statistical Papers, Series E, no. 3. <sup>13</sup> Cf. chapter VII, table III.

<sup>&</sup>lt;sup>14</sup> Economic Bulletin for Europe, 2nd quarter, 1950, pp. 52-60; Yearbook of Labour Statistics, 1949-50.

reducing some of the inequality in standards of living that results from inequality of income. On the other hand, "regressive taxes" (e.g., taxes on basic commodities) will increase inequality, and government expenditures that benefit particular groups not at the lower income level will do the same. Thus, if, as sometimes happens, taxes paid by a peasantry are used in the building of schools in cities and governmental centres, the urban-rural gap in standards of living will be widened.

By and large, the more-developed countries derive a larger proportion—frequently over one-half—of their central government revenues from progressive and direct taxes on income and wealth, while less-developed countries rely rather more on regressive taxes (sales taxes, import duties, etc.).¹⁵ The taxes of local governments are regressive in most countries. The progressiveness of the whole tax system is thus less than what the central government revenues alone would suggest, although the relative importance of local revenues has decreased in most countries as the role of the central government has expanded almost universally.¹⁶

A determination of the degree to which government expenditures have affected the distribution of income in different countries is more difficult. Many government services are of a general nature and their benefit is difficult to apportion among income classes. For example, public health or education programmes primarily benefiting the poor may also benefit the rich. Some programmes do not in effect reach the poor. For practical purposes, however, social services can be regarded generally as providing more benefit to the poor.

The extent of the benefit is difficult to judge on an international basis because of the different systems of classification and the multiplicity of organs administering such services. The historical expansion of governmental social services has been noted in earlier chapters in this report. Recently, however, the proportion of expenditures on social services has declined in some of the more-developed countries, because of increased defence budgets (as well as increased employment).

# RELATION OF INCOME STATISTICS TO VARIOUS SOCIAL STATISTICS

In view of the general interdependence of social and economic characteristics, and of their common evolution through successive phases of historical development, it is to be expected that the total pattern of these characteristics in the high-income countries will differ from that in the low-income countries. For example:

Low-income countries tend to have: high crude death rates, high infant mortality rates, high birth

15 It may be noted, however, that a number of indirect taxes on luxuries are progressive in nature, while land taxes based on crop yield, although usually classified as indirect taxes, have essential qualities of direct taxes.

rates,<sup>17</sup> high proportion of children in the population, high rates of infectious diseases, low ratio of doctors to population, low calorie consumption, low protein consumption, low textile consumption, low literacy rates, low primary school enrolment, low circulation of newspapers, magazines, and books, low circulation of mail, low ratio of radios and telephones to population, etc.

High-income countries tend to have: low crude death rates, low infant mortality rates, low birth rates, <sup>17</sup> low proportion of children in the population, low rates of infectious diseases, high ratio of doctors to population, high calorie consumption, high protein consumption, high textile consumption, high literacy rates, high primary school enrolment, high circulation of newspapers, magazines, and books, high circulation of mail, high ratio of radios and telephones to population, etc.

Many other social indices could be added to these lists, which generally differentiate between the less-developed and the more-developed countries. Various economic indices other than income—for example, percentage of population in agriculture vs. industry or per capita mechanical energy consumed—will also be found to be associated with general patterns of difference in social factors.

While comments on the nature of these associations have been made in other chapters, for example, on the relation of economic development to birth and death rates, disease patterns, food consumption, education, etc., a few salient aspects remain to be pointed out.

The degree of association as revealed by available statistics is obviously affected by the quality of these statistics. As has been repeatedly noted, many of the them are incomplete and are not comparable.

Apart from problems of statistical reliability, however, it is important to note that per capita income is not associated with all social indices in the same way or to the same degree.

Examination of the data on hand, for example, shows that, by and large, correlations with per capita income tend to be highest for consumption items (such as radios and telephones available per capita) that depend most directly upon industrial production and require sizable cash outlays.<sup>18</sup>

In some cases, by the nature of the social factor itself, close correlation is not to be expected. This is true, for example, of the crude death rate which has a rough (inverse) correlation with per capita income, but would presumably not have a very high correlation even if death registration were improved, since, as indicated in chapter II, the crude death rate does not take into account the age composition of the population (high-income countries tend to have a greater proportion of elderly people among whom there is a high incidence of mortality). Infant mortality rates, which are "age-

<sup>16</sup> For example, the share of central government revenue in national income in Canada increased from 12 per cent in 1937-38 to 21 per cent in 1948-49; in the United States, from 7.3 per cent in 1938-39 to 17.4 per cent in 1948-49; in Mexico, from 9 per cent in 1939 to 14 per cent in 1949; in New Zealand, from 22 per cent in 1938-39 to 29.7 per cent in 1949; in Belgium, from 15 per cent in 1938 to 24 per cent in 1949. Exceptions to this trend are almost entirely restricted to less-developed countries.

<sup>&</sup>lt;sup>17</sup> Birth rate is included here as a background social item, although a country's birth rate is obviously not itself a component of the standard of living. The same is true of the proportion of children in the population.

<sup>&</sup>lt;sup>18</sup> The statements made in this paragraph and in the following paragraphs are based upon a rough examination of the statistical correlations between per capita income and various other indices discussed. For lack of space, the detailed statistical tables and diagrams are not presented here.

specific", correlate (inversely) much better with per capita income.

It should be noted that certain relatively low-income countries have social indices corresponding to those of countries with considerably higher incomes. A few examples will illustrate the point. In 1949, Japan (which had experienced a 50 per cent drop in income at constant prices as a result of the war) was at the level of higher-income countries with regard to infant mortality rates, number of physicians per 100,000 inhabitants, literacy and school enrolment rates, newspaper circulation rates, etc. (but not per capita calories consumed, per capita textiles available, and other factors depending more directly upon economic production). Austria has a high ratio of physicians (153.8 per 100,000 inhabitants), as well as high literacy rates, newspaper circulation, and similar indices-while the per capita income is relatively low by comparison, partly as a result of the drop in income occasioned by the war. A somewhat similar situation has been observed with regard to Germany. As a result of the immigration of European physicians, Israel has had the highest ratio of physicians to inhabitants of any country in the world. Ceylon is distinguished from other countries of the same income level by having considerably higher literacy and school enrolment rates (the same is true of the Philippines). As indicated in chapter II,19 Ceylon also has a disease and mortality pattern approaching that of more wealthy countries; but, like other economically less-developed areas where mortality has been drastically reduced (e.g., Puerto Rico), birth rates remain at high levels.20

Conversely, certain countries with relatively high income have social characteristics similar to those of low-income countries. This seems to be particularly true of countries that obtain a high income from oil or other industrial developments which have not, however, significantly affected the living conditions of the people.

Once a certain level of income has been reached, some of the social indices show little or no further variation with the size of per capita income, although a general difference between high income and low income countries exists with regard to these indices. Thus, among the ten or eleven countries of highest income, the marked differences that exist in income appear to have little relation to birth rates; the three countries at the top of the income list-the United States, Canada, and New Zealand—have birth rates higher than those of a number of less wealthy countries. Per capita available calories do not significantly increase with income above a certain point, chiefly for the reason that the amount of food a person needs is biologically defined. Beyond a certain limit, more calories are not useful or desirable so that, as income increases, people tend to spend their money on items other than food (in general, the lower the income, the larger the proportion spent on food).

Literacy rates and primary school enrolment reach the maximum possible level in a majority of countries in Europe, Northern America and Oceania; differences in income therefore no longer play a role among these countries. Circulation of newspapers and letters also does not follow income size among those higher-income countries that have more or less reached a relative saturation point, in the sense that most individuals are financially able to purchase as many newspapers or send as many letters as they wish. Conditions other than income here determine the relative number of newspapers circulated or letters mailed.21

Among the lower-income countries also, social indices quite frequently do not follow income differences, again in spite of the fact that, as a group, these countries differ from high-income countries with regard to the indices in question. In many cases, this may be due to the inadequacies of the statistics involved. In other cases, human biology may impose limits. For instance, differences in income would not be expected to have much differential effect upon birth rates among areas where there is no family planning in any event. And in rural areas where the great majority of the people are illiterate, differences in income will not be significantly reflected in differences in newspaper consumption, etc.

Correlations between income and social indices are often demonstrated with more precision in studies of different income groups within a given country or in studies of the same country at different stages of historical development. It should be noted, however, that while the various economic and social factors tend to be interrelated under such circumstances, certain factors may reverse their trend without concomitant reversals in others, at least in the short run. Thus, there is evidence that death rates, infant mortality rates, school enrolment and literacy rates, once having achieved a certain level, have resisted reverses, maintaining levels determined by past conditions or even continuing to improve, when per capita income has fallen. Similarly, such factors may be subject to rapid improvement, as a result of new methods and planning, without necessarily being accompanied by equally impressive strides in per capita income.

It is not the purpose of this report to enter into an analysis of cause and effect that may be involved in the various correlations discussed in this chapter. Two points, however, deserve mention:

First, the fact that two measures may be correlated does not, of course, prove a causal relationship. Thus, the number of telephones in use per person is generally higher in countries with a high proportion of deaths from degenerative diseases, but the one hardly causes the other. Because countries differ in total socioeconomic complexes, countless incidental correlations can be found.

Secondly, where a good case for causal relationship can be made out, the relationship is very often reciprocal. Thus, higher income permits better education and better health, and better education and better health in turn lead to higher income. Conversely, retardation in one factor tends to obstruct progress in others. A comprehensive and co-ordinated approach is therefore required in programmes for raising standards of living.

<sup>&</sup>lt;sup>19</sup> See p. 29. <sup>20</sup> See chapter II, p. 19.

<sup>&</sup>lt;sup>21</sup> In general, quantitative comparison on an international basis of items of a more cultural nature, e.g., literature, art, music, drama, etc., is not very meaningful. It can be assumed that if an index depending significantly upon mass-production is used (for example, the number of phonograph records sold per person), then there will be a fair correlation with per capita

income; if an index such as the number of separate booktitles or paintings marketed in relation to population size is used, then the correlation is much less apparent; and if the extent of cultural activity carried out in the local community or in the home is considered, then differences in tastes and values are so great, and the problem of quantification so complex, as to defy useful comparison.

# Chapter X

# SOCIAL CONDITIONS IN LATIN AMERICA

### Introduction

The Latin-American nations share a common Iberian or Mediterranean heritage and many historical traditions, customs, institutions and social values which give them a basis for common understanding. Furthermore, Latin America is part of the European culture sphere, sharing in the technological and ideological development of Europe from the colonial period up until the present.

This is particularly true of urban Latin America. The twenty Latin-American cities of more than 200,000 inhabitants (1940) are in most respects like large cities in Western Europe or in Northern America. They have similar modern commercial and residential districts, similar mass communication facilities (newspapers, magazines and radios), and similar cultural and social institutions. In general, larger proportions of their populations live below the poverty line than in most cities of Europe, and the slums in which the poor live are less affected by enforcement of minimum standards of housing and sanitation. The social problems of the cities, however, broadly resemble those of European cities, and have been met, to varying degrees, by social legislation and welfare programmes similar to those of Europe.

Many of the cities are ports oriented to the export of raw materials, and, in general, have intimate commercial as well as cultural ties with Europe and Northern America. They are usually either national or provincial capitals, and contain the residences of most large landowners and other well-to-do families. Lawyers, physicians and other professionals are concentrated in such cities where there are people able to pay for professional services, as well as opportunities for commercial and government employment and superior standards of comfort and social life. The cities are also centres of consumers' goods industries, which have expanded rapidly in recent years, and which attract increasing numbers of migrants from the rural areas in search of higher cash wages. Although each Latin-American city has its own individual characteristics and although each partakes of the character of the nation of which it is a part, there is a great similarity among the cities of Latin America.

Yet Latin America is essentially an area of rural inhabitants engaged in agriculture. It is in small com-

munities and in the rural zones of each country that the majority of Latin-Americans live.¹ And, it is among these rural people that the social problems of Latin America are in general felt most intensely. Unlike the situation in the great cities, few medical doctors and other trained technicians are to be found in most rural districts of Latin America. There are low standards of comfort, few opportunities for education, few sanitary facilities, poor communications and transportation, and inadequate methods of social welfare in most of the rural hinterland. It is for this reason that the following account of social conditions in Latin America will focus primarily upon small communities and rural groups.

Despite the common elements of cultural heritage in Latin America and the similarity of metropolitan centres, there are great contrasts from one area to another in the rural countryside and in the traditional way of life of its inhabitants. There are differences in physical environment, in historical development, in the racial composition of the population, in economic pursuits, and in local customs and institutions. Three main regions may conveniently be distinguished in describing Latin-American social conditions. First, there is the region formed by highland areas of the west coast countries-Bolivia, Peru, Ecuador, Colombia, the Central American Republics, and Mexico. Second, there is the region of the Caribbean and Atlantic lowlands-comprising the Caribbean Islands, the coastal parts of Venezuela, Colombia, the Guianas, and northern Brazil. And, finally, there is the southern region made up of southern Brazil, Uruguay, Argentina, Paraguay, and Chile.

West Coast countries: in the mountainous area formed by the spiny backbone of the American continents, between the Valley of Mexico and northern Chile, the Spanish conquerors encountered a dense aboriginal population. It has been estimated that at least 10 million Indians inhabited Mexico alone and Peru may have contained more than 6 million. These people were members of the complex aboriginal civilizations of America—the Aztec, the Maya, the Chibcha, the Quechua, the Aymara, and others too numerous to list. In the mountains, the Spaniards sought and found gold and silver. The dense Indian population offered an ample labour supply for the mines and for continued agricultural activities on the lands taken over by the conquerors. Although the Indian was dominated by the

<sup>1&</sup>quot;Argentina and Chile are the only Latin-American countries where a majority of the population lives in areas classified as urban. In most other countries, the urban percentage ranges from about 26 to 27 per cent." (United Nátions, Economic Survey of Latin America 1948, p. 153). The percentages classified as urban, however, generally include small communities (in Argentina, those with 2,000 or more inhabitants) which resemble the rural villages more closely than they do the true urban centres described above. "Between 60 and 70 per cent of the total population of Latin America is engaged in agriculture... In some countries where the export of mineral products is highly important in the economy, the popu-

lation is still largely dependent on agriculture. According to the census of 1940, 65 per cent of the total population of Mexico was then engaged in agriculture and allied activities (in 1950 the proportion had declined to 55-60 per cent). In Venezuela 51.2 per cent of the total gainfully-occupied population was engaged in agriculture in 1941. In Peru (1940) out of a total labour force of 2,475,000 some 1,546,000 were engaged in agriculture. The same situation exists in Chile and Bolivia." (ILO, Report of the Director-General to the Fifth Conference of American States Members of the International Labour Organisation, pp. 68-69).

Spaniard, and although his society was recast in the Spanish moulds of the sixteenth and seventeenth centuries, he has contributed strongly to the cultural heritage of this region. In many rural parts of this region, the Indians have not been assimilated and have continued to be the most important segment of the population.

The contemporary "Indians" of these West Coast countries have been defined as "groups who have preserved many pre-Columbian ethnic and cultural characteristics and who are still living within a social and economic framework established by institutions of the colonial period".2 Most of them are descendants of the aboriginal peoples but they are distinguished as "Indians" by social rather than physical or ethnic characteristics. In the same countries, there are many in the population who are physically Amerind, but who consider themselves to be Mexicans, Guatemalans, Peruvians, as the case may be, and not Indians. The Indian may be distinguished from his compatriots of the same physical characteristics by the fact that he habitually speaks an aboriginal language (Nahuatl, Maya, Quechua, Aymara, etc.); by his "Indian costume" (generally of sixteenth century Spanish origin); and by the fact that he feels that he is a member of a distinct "people"—that is, of his small community. He is a member, for example, of the community of Santiago Chimaltenango rather than a Guatemalan, of the community of Kauri rather than a Peruvian. Each Indian community has its own religious and political organization, derived partly from the sixteenth century community organization taught them by their Spanish conquerors. The Indians are ostensibly Catholics but in practice their religious forms are a fusion of aboriginal patterns and Spanish Catholicism.

These highland Indians are mainly agriculturalists, cultivating crops most of which are of indigenous origin, such as maize, beans, potatoes, oca and quinoa. They have both European domesticated animals (sheep, cattle, goats, chickens, donkeys, etc.) and indigenous animals (llamas, alpacas, guinea pigs, turkeys, etc.). Among many highland Indians, the comunidad (community) controls the land. In the Andean highlands, the arable land is generally held and worked by individual families while pasture land—is held and used communally. Sometimes land is periodically redistributed among the community members, sometimes part of the land is worked collectively and part by individual families.<sup>3</sup> Alienation of land, either com-

<sup>2</sup> ILO, Report of the Director-General to the Fifth Conference of American States Members of the International Labour Organisation, p. 39.

munal or private, to outsiders is generally prohibited, or at least discouraged by community opinion. This land is worked mainly by hand; even ploughs are generally of a home-made wooden variety. Produce is mainly for subsistence, or for sale in local markets for local consumption.

The material way of life of the non-Indian population in the rural areas of these highland west coast countries differs very little from that of the Indians. The Mexican mestizo communities, the Guatemalan ladino communities, and the cholo communities of Peru (as these non-Indian groups are called in the different countries) have a standard of living approximately the same as the Indian communities in the same area. The non-Indians are also subsistence farmers producing for local consumption and have the same crops and use the same methods as the Indians. But these peasants generally speak the language of the country of which they are nationals. They share in the religious and political traditions of the nation—and, particularly if they are literate, they participate politically. With a few exceptions, their system of land tenure stresses individual ownership.

Estimates of the number of highland Indians vary between 14 million and 30 million people, depending upon the definition used to distinguish Indians from peasants (language seems to be the most common criterion for classifying a person as an Indian, but in some districts there are thousands of people speaking an aboriginal language who do not consider themselves as Indians). Population statistics do not indicate the number of peasants but it would be safe to say that at least 30 per cent of the population of these west coast countries might be so classified. Many people in the rural districts, of course, do not fit into either of these rather arbitrary classifications. There are many Indians living on haciendas, the owners of which allow them the use of land in exchange for labour. There are Indians who work in mines or who live in or near cities, such as La Paz and Cuzco, but who still retain the distinctive culture traits of Indians. There are Indians who work part of the year on coffee fincas in Guatemala for lack of sufficient land. Once these Indians have lost contact with their traditional community, however, they are well on their way to losing their distinctive characteristics. One of the main social processes in these highland countries is the combined incorporation of the Indian into national life as a simple peasant or as an industrial or agricultural worker.

The eastern lowlands: in the Caribbean Islands, along the coast of Venezuela and Colombia, in the Guianas, and in northern Brazil, the Europeans found only a sparse aboriginal population. These culturally simple tribal peoples had little resistance to the forms of forced labour imposed upon them and to disease imported from

Adequate information is lacking as to the number of Indians who are members of such communities or the amount of land held by them; the number of communities officially registered in Peru alone at the end of 1949 was 1,322, with an aggregate population of 1,006,586 holding 4,163,512 hectares. Until the second decade of this century, most countries did not grant legal status to Indian communities. "This facilitated the alienation of communal land through purchase or appropriation by powerful landowners, with the result that many of the members become tenants or peons on the haciendas... Many indigenous comunidades have retreated to places distant from agricultural and stockraising centres. It is estimated that a large proportion of them are now to be found in the wilds or páramos of the tablelands, sometimes in regions which are difficult of access. Generally the communal land is poor and frequently it is broken up into numerous isolated sections between which are wide stretches forming parts of haciendas." ILO, op. cit. p. 82.

<sup>&</sup>lt;sup>4</sup> The First Inter-American Indian Congress held in 1941 set the number of "predominantly indigenous" persons in Latin America at 30 million. This number included several million people of mixed Indian-Caucasoid descent, others who were Amerind physically but not "Indian" socially or culturally, and even a few tribal Indians of the lowlands; 15 million would be a conservative estimate of the number of people in the highlands fitting the description given above for Indians. Cf. ILO, Indigenous Workers in Independent Countries, document CEIL/I/3, 1950, pp. 209-210.

Europe; they either died off or fled to the inaccessible headwaters of the rivers. The mineral resources of the lowlands were limited but the Europeans soon found the terrain ideal for growing sugar, a new luxury in Europe. For their labour supply, they turned to Africa; millions of Negro slaves were imported during a period of more than 300 years. The plantation system, using slave labour and producing one crop for export, became the basis of the characteristic way of life of this lowland region. Even after the end of slavery in the nineteenth century, the plantation system continued, with wage labour replacing slaves, and with new export crops—such as coffee, tobacco, cacao, and bananas—supplanting sugar in some areas.

Even today a large proportion of the rural population in this lowland region are workers on large plantations which produce commercial crops for export. The modern plantations are operated by corporations or by family enterprises; they involve considerable capital investment and the system of operation often is correspondingly highly organized and centralized. Subsistence production is generally subordinated to the production of one cash crop. The larger plantations grow crops which require a year-round labour supply and the resident labourers form nearly self-contained communities. There may be a plantation store, a school, a chapel, sometimes a hospital, and other facilities of any regular community. Most plantations, of course, do not have all these features. If the crop requires seasonal labour, many of the workers may come from the outside, sometimes from a great distance, to supplement their income by a few weeks of wage labour. Whether or not the crop is processed on the spot immediately after harvest (as in the case of coffee), or whether it requires heavy machinery for processing (as in the case of sugar refineries), also affects the character of the plantation and the community dependent upon it. By and large, however, there are fundamental similarities among plantation communities throughout the region of the eastern lowlands; and the way of life in these plantation communities differs in many important respects from that of the Indian and peasant communities of the western highlands.

In the eastern lowlands, however, there are numerous rural communities similar in many ways to the (non-Indian) peasant communities of the highlands. There are numerous subsistence farmers working their own small parcels of land; or cultivating land, through sharecropping or another form of tenancy. Most of the rural population of Haiti and of the great expanse of the Amazon Valley are, in this sense, peasants. Many of these peasants work as seasonal labourers on plantations, and in vast districts they produce cash crops (such as coffee or tobacco) in addition to their subsistence products. But, in general, like the Indians and peasants of the highland region, the peasant population of the eastern lowlands participates only to a limited degree, either as producers or consumers, in the economic system of the nation.

The southern countries: the third region of Latin America is formed by Argentina, Uruguay, southern Brazil, Paraguay, and large portions of Chile. Here, a sparse but warlike aboriginal population of nomadic hunters was gradually pushed back into the interior.

Cattle brought by the first European settlers ran wild and multiplied in the grasslands. Until the nineteenth century, the large ranches of this southern region exploited only the tallow and the hides of these wild herds. In the nineteenth century, however, as transportation was improved, ranch owners began to export fresh meat to Europe and herds were improved with high-quality beef animals. In addition, temperate zone crops were planted on a larger scale. The new prosperity of the region attracted European immigrants who arrived in large numbers during the last part of the nineteenth century and during the first decades of the twentieth century. These recent immigrants strengthened the European tradition of the southern countries, producing a contemporary way of life more nearly European than that of the northern lowland countries, where African influences have been felt strongly, or than that of the highland countries, where the American Indian has been an important cultural influence.

In general, this southern region of Latin America is the most urbanized part of the whole area. It has the highest per capita productivity. Although there are numerous subsistence farming peasants, the rural communities are more frequently modern trading towns, similar in many respects to small towns in the agricultural zones of the United States and Northern Europe. They are centres of trade for the large commercial cattle ranches and large-scale wheat farms on which tenant farmers produce for a national and international market. The trading communities are more closely tied by communication and transportation to the major centres of the nation than are peasant communities, and life in such towns is thus closely related to the economic trends and the political and cultural life of the nation. Such communities tend to be larger than peasant or Indian communities, for there is more commerce, a greater number of artisans, and even some processing industry to serve the commercial farming population around them (trading communities are, of course, not limited to this southern region for they exist throughout Latin America-in northern Brazil, in Costa Rica, in Colombia, in Mexico, and elsewhere; but Indian and peasant communities are more characteristic of the highlands and the old plantation system of the eastern lowlands).

These three regions of Latin America—with their characteristic types of rural community life, which are here delineated roughly and most briefly — are the result of distinct trends in historical development in Latin America. Thus, while the Latin-American nations share many common features, potentialities and social problems, these variations must be kept in mind when discussing the social conditions of such an immense area.

### POPULATION AND LAND

Two demographic facts stand out with relation to social conditions in Latin America. The first is the sparsity of population, relative to the total area. Sixteen per cent of the world's total land is contained in Latin America, but only about 6 per cent of the world's population.<sup>5</sup> The second is the uneven distribution of the

<sup>&</sup>lt;sup>6</sup> United Nations, Economic Survey of Latin America, 1948, New York, 1949, p. 140.

population. There are areas of exceedingly dense population—such as some of the Caribbean islands and some of the valleys of the west coast highland countries. In contrast, there are great expanses of almost uninhabited land—such as the Amazon lowlands, where population density is hardly more than one person per square mile.

The amount of territory put to economic use in most Latin-American countries falls far below the actual area. In Chile, the deserts and forests occupy 76 per cent of the national territory. In the case of Brazil, an "Atlantic coast strip about 500 kilometres wide contains 91 per cent of the entire railroad mileage, 70 per cent of the federal highway system, 89 per cent of the population, and approximately 95 per cent of the cultivated area and resultant production".6 The Caribbean, even omitting Puerto Rico and Jamaica, constitutes only 1 per cent of the total land area of Latin America while containing 7 per cent of its population. El Salvador and Uruguay are actually the only countries in mainland Latin America which have effective national territories even approximating their respective total areas.

This uneven distribution of population in Latin America—and the failure to make the most effective use of its total immense area—is closely related to the systems of land use, of settlement and of land tenure which prevail. Control of the land has traditionally been associated with political and economic power and social prestige. Large-scale agricultural enterprise, with the control of work opportunities vested in the hands of a few land-owning families or corporations, is still characteristic of great areas. The land-holding classes of Latin America, schooled in the traditions of land as a symbol of prestige, are given to speculative production on the one hand, and to the practice of maintaining large tracts of idle but inaccessible land on the other. Land resources of the region have been diminishing for centuries, because of inefficient methods of cultivation, such as fire agriculture (brush-burning), lack of fertilizer, deforestation, erosion, etc. At the same time, the concentration in ownership, often without full use of the land, has aggravated the problem of land pressure. "In Latin America as a whole, about one and a half per cent of the individual landholdings exceed 15,000 acres. The total of these holdings constitutes about 50 per cent of all agricultural land. While much of the land is not suitable for crop production, a substantial proportion consists of idle lands that have been held for generations." "In Argentina, 85 per cent of the privately held land is in estates larger than 500 hectares (1,250 acres), while 80 per cent of the farm population owns no land."38 In Brazil, according to the 1940 agricultural census, holdings of 1,000 hectares and over accounted for 48.3 per cent of the "area utilized for agriculture"; only 2.8 per cent of the area of these large holdings, however, was actually cultivated.9 "In Chile 64 per cent of the privately owned land is in estates of more than 5,000 hectares, which belong to

only 750 proprietors. According to a recent study 43.3 per cent of the cultivated land is owned by 0.74 per cent of the landowners. In Venezuela (census of 1937) out of 108,761 farms, 43,283, or 40 per cent, were managed by landlords—a relatively high percentage. In Uruguay, sixteen landlords hold an area of 400,000 hectares, constituting practically half the cultivated land area of the country." In Bolivia, the most striking feature of farm property is the contrast between a relatively small number of vast estates, and tens of thousands of small farms which altogether probably cover no more than 10 per cent of the limited area under cultivation.11 In Cuba, according to the 1946 census, 894 farm units of more than 1,000 hectares each occupied 36 per cent of the total farm land, while farms of less than 25 hectares, though constituting 70 per cent of the total number of farm units, held only 11 per cent of the land.12 Most of the larger units in Cuba are sugar plantations, only a small part of the area of which is actually planted with cane; it has been estimated that the Cuban sugar mills could operate profitably with about 40 per cent of their present holdings.

Similar concentrations of land are found throughout Latin America, except in parts of Costa Rica, El Salvador, Haiti and Mexico. In a number of cases, fertile valley land contained in these large holdings is used only for grazing, if at all, while most of the agricultural population is confined to uneconomically small hillside holdings of less fertile and less accessible

In the latter cases, extensive subdivision has pushed the average farm size far below standards of optimum individual farm productivity. The individual farmer generally cannot obtain sufficient credit for farm improvements, and with the inefficient methods of cultivation, these small plots are hardly sufficient for subsistence. The peasant is frequently forced to seek outside labour to supplement his income. Landowners generally maintain unaltered the area farmed for their own benefit, so that in Bolivia, for example, increasing numbers of share farmers must support themselves on an ever-decreasing proportion of farm land. The unwillingness of the Aymara and Quechua Indian farm workers of Bolivia to migrate from the cold highlands to the subtropical lowlands-where they would have to cope with new methods of cultivation, new conditions of life, and new diseases—intensifies this problem.14 In Costa Rica, only an estimated 10 per cent of the 10 million arable acres in the country are under cultivation (1940). Most of this cultivated land lies on the central

<sup>&</sup>lt;sup>6</sup> United Nations document E/CN.12/169/Add.1, p. 13.

<sup>\*\*</sup> United Nations document E/CN.12/105/Add.1, p. 13.

\*\*Land Reform: Defects in Agrarian Structure as Obstacles to Economic Development, United Nations document E/2003/Rev. 1, 23 July 1951, p. 19.

\*\*Ibid., p. 10, citing Wendell C. Gordon, The Economy of Latin America, New York, 1950, p. 35.

\*\*Ibid., p. 12.

<sup>10</sup> Ricardo Marín Molina, Condiciones económicosociales del campesino chileno, Santiago de Chile, 1947; and El plan Frugoni de reforma agraria, Montevideo, 1944, p. 10, cited in ILO, Report of the Director-General to the Fifth Conference of American States Members of the International Labour Organi-

<sup>11</sup> United Nations document E/CN.12/218/Add.2, p. 58. "Less than 2 per cent of Bolivia's total land is in cultivation." Report of the United Nations Mission of Technical Assistance to Bolivia, p. 53.

<sup>12</sup> International Bank for Reconstruction and Development,

Report on Cuba, p. 90.

13 ILO, Report of the Director-General to the Fifth Conference of American States Members of the International Labour Organisation, p. 85.

<sup>14</sup> United Nations document E/CN.12/218/Add.2, p. 7.

plateau, where nearly 75 per cent of the country's population dwells. One-third of this land is put to coffee, including over 21,000 small coffee farms. But about 70 per cent of these small farms are less than 7.5 hectares in size and more than half are less than 1 hectare each. Such *minifundios* cannot support their owners, who must work part-time on big plantations to survive. Similar situations are typical of highland Puerto Rico and Cuba, among other areas of Latin America. Even when more land is available, the peasant can cultivate only a limited amount at a time with his primitive agricultural techniques. The following description is representative of fairly wide areas in Latin America:

"The typical peasant cultivates his land with a hoe and a machete, almost his only farming tools. He plants his land with the same crop year after year sometimes two or three crops a year. His seed is often poor, and his yields are low. He uses no fertilizer or animal manures, and usually burns the crop residue instead of adding it to the soil. As a consequence, much of the land of Haiti is worn out, and produces only inferior crops of probably reduced nutritive value. In his search for new lands the peasant strips the mountain tops and steep slopes of their protective forest cover, even though flatter land remains unused for lack of means of irrigation or flood control, or through ignorance of proper techniques in manuring, pest-control or cultivation. When the forest cover is cut and burned, the scant layer of fertile soil is exposed to the rains, which carry it to the valleys and to the sea. The land after a few years becomes less and less productive and is abandoned, and new lands are then cleared in the same way."15

Furthermore, the insecurity of tenure for the tenant farmer as well as insecurity of title for the small land-owner generally makes for an inefficient system of cultivation. Although laws nowadays protect tenants in most countries, tenants in many areas must still depend in practice upon the insecure force of custom, personal relations with the landlord, and other non-legal mechanisms for such security as they have. Uncertainty of tenure discourages improvements on the land as well as conservation of the soil. Confusion and uncertainty of title have similar effects, and litigation resulting from insecure title is often a heavy financial burden upon the peasant.<sup>16</sup>

In many portions of Latin America land registration is still in a confused state and the small land-holder (who is frequently illiterate) is often prey to others who have legal skill and more prestige.

# Population trends

As indicated in chapter II, Latin America has been in recent years the fastest-growing major region of the world in terms of rates of natural increase.

Growth has been particularly rapid in the area of greatest over-all density of population, the Caribbean. Puerto Rico is noteworthy in this respect. The increase

<sup>15</sup> United Nations Mission to Haiti: Report of the United Nations Mission of Technical Assistance to the Republic of Haiti July 1949

has been due to decreases in the death rates following upon improved health facilities, while birth rates have not decreased. Present indications are that population will continue to grow rapidly in the future; the rate of growth may even be accelerated. The result has been a problem of population pressure upon the land—in the Caribbean, in parts of Mexico, Central America and the Andean countries. Excess population in some areas does not counteract a shortage of manpower elsewhere.<sup>17</sup> The peasant who is underemployed and undernourished on a tiny subsistence plot does not migrate to underpopulated areas without planned assistance in credit, transport and equipment, and without instruction in new types of farming.

Migration from Europe and Asia has long been an important element in population increase in the southern part of South America (although internal growth has always been the most important factor). Demographic statistics for migration are unsatisfactory, but it appears that Argentina received a balance of 3,550,000 immigrants between 1857 and 1948. Brazil received about 3,300,000 from 1872 to 1940.¹¹s In Brazil, immigration together with a high natural rate of increase resulted in a population rise of 192 per cent in the period 1890-1940.

Immigrants to Latin America have always tended to settle in the cities, in spite of deliberate national policies to funnel the incoming people into the rural hinterlands. Obstacles of climate and health conditions, the lack of land available for freehold, and absence of land settlement schemes integrated with the development of transport and social amenities, have, among other factors, kept the immigrants in the cities and the large-scale commercial plantations and ranches. Immigration to Latin America has been, in one sense, a phase of a widespread rural-urban exodus; the peasants of European countries have come to New World cities. The main exceptions to this tendency of immigrants to settle in cities were the colonization schemes organized by some groups of immigrants—such as the Germans in southern Brazil and southern Chile, and the Japanese in Brazil-who bought large tracts of land and settled down as self-contained communities. More recently, the Latin-American governments have made more systematic efforts to encourage rural settlement. Recent European migrants, however, have been predominantly of urban origin, and they are even less inclined to become pioneer farmers than the immigrants of the nineteenth century.

# Social stratification and the General standard of Living

Although stratification is less rigid in Latin-American society than the caste system of India or the caste-like hierarchy of Europeans and Natives found in some colonial areas, it is none the less an important aspect of the social scene, fundamental in determining social conditions in the area. The present social classes of Latin America were formed mainly in the colonial period, when the present-day republics were governed by their

<sup>18</sup> United Nations, Economic Survey of Latin America, 1948, pp. 156-157.

Mations Mission of Technical Assistance to the Republic of Haiti, July 1949.

16 Ibid., p. 88. United Nations, Report of the United Nations Mission of Technical Assistance to Bolivia, New York, 1951, p. 66. Alfred Metraux, Making a Living in the Marbial Valley (Haiti), UNESCO document ED/OCC/10, p. 18.

<sup>&</sup>lt;sup>17</sup> United Nations document E/CN.9/55, p. 140, Fifth Session, Population Commission.

European "mother countries". Relatively few Europeans came to the New World during the colonial epoch. Those who did, together with their descendants, often formed an aristocratic landowning class, which dominated the local scene politically, economically and socially. They were a minority of the population of the colonies; the great mass of the population in most cases was formed by the indigenous population (especially in the west) and by imported Negro slaves (especially in the Caribbean and in Brazil). Until the nineteenth century, the Indians and Negroes were either peons, indentured labourers, slaves or "savages" living outside the orbit of national affairs. As slavery and debt bondage declined, and as the Indians were drawn more into national life, these groups entered the national society at the bottom of the social and economic hierarchy. They became peasants, plantation or mine wagelabourers, industrial workers and unskilled manual labourers of all sorts. During the nineteenth and early twentieth centuries, economic and social mobility has been too limited to allow the great majority of the descendants of these slaves, peons and others substantially to improve their relative economic and social rank. In most countries, social upheavals and the influx of European immigrants have changed the composition of the upper classes—descendants of the colonial aristocrats are now only one of several components-but their size relative to the rest of the population has not increased, and the gap between the ways of life has remained wide. In most localities only small groups exist which are comparable to the large middle classes of Europe and Northern America, although there are present indications that these middle-class groups are increasing in size.19

Acknowledgement of these important class differences is essential in considering the levels of income and consumption in Latin America. A great discrepancy between the material way of life of the so-called upper class and that of the lower groups is known to exist, but precise statistics bearing on this subject are generally lacking. A 1947 estimate of the distribution of personal income for Colombia is suggestive of the general pattern in wide areas of Latin America: 2.6 per cent of income earners earned 29.9 per cent of the total; 9.7 per cent earned 13.2 per cent; and the remaining 87.7 per cent earned 56.9 per cent of the total. The first two groups were predominantly urban and the third predominantly rural. The average income for members of the first group (2.6 per cent) was 12,307 pesos (\$US7,032) per year for the second group (13.2) per cent), it was 1,457 pesos (\$US833); while the predominantly rural group comprising the bulk of the wage earners had only 696.5 pesos per year (\$US398) on the average.20 A farmer in the most depressed agricultural areas earned less than 400 pesos per year. "Since each income earner [in these depressed areas]

19 Materiales para el Estudio de la Classe Media en America Latina, Edicion y Recopilacion de Theo R. Crevenna, Union Panamericana, Washington, D.C., 1950, vols. I-V. Many of the articles and monographs included in this collection begin or conclude by indicating the limited nature of the middle class in the Latin-American nations.

<sup>20</sup> International Bank for Reconstruction and Development, *The Basis of a Development Program for Colombia*, Washington, D.C., 1950, pp. 34-35.

was in turn supporting an average of four people, large groups of the population had to survive on an average of only 100 pesos which was equivalent at the existing exchange rate to less than \$US58 per year."<sup>21</sup>

Other studies of income in Latin-American countries have indicated similar wide discrepancies between occupational groups, the annual average income of agricultural wage earners often falling below \$US150.

Much of Latin-American life goes on outside the money economy. In rural districts the daily economic life may be carried on to a considerable extent, via barter—the exchange of goods and services without money payment-and by traditional arrangements for payments of service in kind rather than cash. An Indian family in the Guatemalan highlands or in the Peruvian Andes or a peasant in Haiti or Brazil raises what he eats and exchanges produce or labour for other locallyproduced necessities. It cannot be said that such people live totally outside the money economy, for the Haitian peasant and the Guatemalan Indian make use of money for local trading and calculate produce in monetary terms; but the amount of cash income which goes through their hands is generally very small. Systems of tenancy and agricultural labour on the old-style haciendas frequently do not involve cash transactions. Indian tenants in particular are likely to pay rent in labour, working a specified number of days a week in exchange for a subsistence plot; many combinations of this system with share-cropping and wage labour are also found. There is also an emphasis upon exchange of goods and services among the workers on plantations and in mines, even though such workers are generally paid wages. These workers seldom actually deal in cash, since they are given wages in credit, which they draw upon for food and other necessities at the plantation or mine store.

Like the agricultural and industrial wage earners, the Indian and non-Indian peasants are able to purchase few manufactured articles and imported foods, but they may have a more secure source of food supply, since they are essentially subsistence farmers and often they are almost self-sufficient in regard to clothing,22 which they spin and weave from wool from their own sheep. Living as they do on the margin of the national economy, these Indians and peasants have necessities and desires determined by their own culture and quite distinct from those of urbanites and wage earners on plantations and in mines. The numerous fiestas on religious holidays and on other occasions, which are so common throughout Latin America, are an example of such distinctive cultural preferences. In Bolivia, it is reported that family expenditures on a single fiesta may amount to as much as 20,000 to 30,000 bolivianos (\$US200-300),23 and among the peasant populations of lowland Brazil a couple with a cash income of only 300 cruzeiros per month (\$US16) may go into debt, spending as much as 2,000 cruzeiros (\$US108), as the spon-

23 Ibid., p. 91.

<sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> United Nations, Report of the United Nations Mission of Technical Assistance to Bolivia, p. 91. It is notable, however, that the clothing standards of Indians or peasants often do not include shoes. These people go barefooted or wear sandals, which makes them vulnerable to hookworm and other parasites.

sor of a "fiesta" in honour of a saint.<sup>24</sup> Such expenditures seem excessive and difficult to understand from the point of view of the outside observer—and costs of this kind do indeed use up cash that might be expended on food, clothing, medicine and other material necessities. But it must be remembered that a "fiesta" serves significant social, cultural and religious ends, and is often an important aspect of community solidarity and integration.

### Housing

The houses in which Latin Americans live range from the simple wattle-and-daub huts of the Indians and peasants and the barracks-like dwellings on many plantations, to the modern apartment houses of the great Latin-American cities and the elaborate country homes of plantation owners. Housing statistics can hardly reflect these great contrasts for it is not a simple problem of overcrowding but of general substandard homes for the majority of the rural population and of crowded and substandard conditions for the low-income families in the cities.

The rural peasant normally builds his own one-room dwelling from mud, stone, thatch, bamboo or whatever materials may be locally available and traditionally used. For a kitchen, he makes a small out-building or lean-to. The dwelling usually has no windows. However cold the climate, there is no provision for heating; fuel is too scarce in the highlands to use for anything except cooking. There is no floor, except the earth. Usually there is little or no furniture. If the climate is equable, the family spends most of the day out of doors, but sleeps huddled together in the one unventilated room. Most babies are born in the home, and unsanitary conditions increase the danger to mother and child.

Housing conditions on the old-style plantations are usually at about the same level; the landowner taking no responsibility for housing his workers except to give them a piece of land to build on. In most cases, the peasant or hacienda worker has no real opportunity to improve his housing. He has neither tools nor skills to build anything more substantial than the traditional hut, and he can use only material which can be obtained free—mud, palm leaves, sticks, sometimes scraps of tin or lumber.

Housing conditions on modern plantations are somewhat better as a rule, though still at the level of the barracks or one-room hut. The plantation management usually provides a more substantial hut than the worker could build for himself, and some kind of water supply and sanitary facilities. Conditions vary, of course, from fairly adequate housing on some modern plantations to the huts resulting from the *laissez-faire* attitude of the old-style landowners. In several countries, legal minimum standards have some effect on the situation.

When the rural worker goes to the city, he finds an extreme shortage of any kind of housing. Most of the cities are growing rapidly, and private construction concentrates on luxury housing and commercial buildings. The most common form of housing offered the worker is one in which a number of single rooms open on a courtyard; the latter usually contains a water tap

24 UNESCO document NS/YIHA/14, p. 19.

and whatever provision for cooking, washing and sanitation there may be. Each room contains a family with several children. Rents for this type of accommodation may take as much as 25 per cent of the workers' earnings.

The alternative to this type of slum is a transplantation of the rural hut to the urban environment. Rio de Janeiro, San Juan, Guayaquil, and many other Latin-American cities have slum suburbs—built on hillsides or extending out over brackish tidal flats—consisting of mosaics of tiny shacks of scrap wood and tin. Their inhabitants may avoid paying any rent, or may pay a small rent for the land on which they have built their huts. The inadequacies of these huts are multiplied when they are crowded together.

Given existing income levels, urban and rural housing can be improved only by very extensive government and private housing projects, and these are feasible only to the extent that cheap and durable methods of construction are developed. Low-cost housing developments up to the present have frequently reached only the lower middle class and skilled workers; the dwellers in the worst slums could not pay even slightly higher rents without cutting down food consumption, and have sometimes resisted clearance of their hovels because they feared the new housing would cost more and that they would have nowhere to go once their existing community was destroyed.<sup>25</sup>

In urban areas, the housing problem is aggravated by the rapid rate of population growth. In rural areas, widespread improvement in housing appears at present to be more readily attainable in large-scale plantations and mines, to the extent that the administrators and regulating bodies of the government concerned actually set minimum standards and see to their enforcement.

#### Nutrition

The diets of the Latin-American peoples traditionally depend on a limited number of staple foods. Some of these staples derive from the food patterns of the pre-Conquest population, others from those of the conquerors, still others from the search for the cheapest energy-producing foods for slaves. These patterns have changed and intermingled to some extent over the centuries, but there has been a remarkable stability. The highland Indian still depends on maize or potatoes, the peasant of the Brazilian interior on manioc (also called cassava or yuca), the Caribbean plantation worker on rice, beans and dried codfish. The staple diets are frequently inadequate even in content of calories, and are almost always deficient in vitamins and other nutrients.

While most Latin-American countries are exporters of food products, these are usually "dessert" crops, such

<sup>&</sup>lt;sup>25</sup> In Colombia, "the average dwelling of about 20 square meters (10 feet by 20 feet) shelters 6.4 people. Some 200,000 shelters are estimated to be under 12 square meters (9 feet by 12 feet), an indication of shocking overcrowding". At the same time, "the average Colombian farmer, urban laborer, and white collar worker cannot use more than 10 to 15 per cent of his earnings for housing". Only 10 per cent of the population can afford the allocation for rent (about 20 per cent of earnings) usual in the more-developed countries. International Bank for Reconstruction and Development, The Basis of a Development Program for Colombia, p. 235.

as sugar, coffee and cocoa. Production of the staple foods, due to low productivity of the peasants and haciendas and the concentration on commercial export crops, is usually barely adequate for the present low level of consumption. Several countries—particularly Bolivia and Venezuela—in which the majority of the population are cultivators, must import much of their food.

Unfortunately, exchange of foods among the Latin-American countries is minimal. There is a surplus of beef in one country, a surplus of sugar in another, a surplus of coffee in a third, but difficulties of transportation and monetary exchange prevent these from reaching areas with shortages.

Much has been made of the difficulties which culturally-determined food habits present to efforts to improve diets. There is no doubt that such preferences are deep-seated and difficult to change. But there is also no doubt that, in Latin America, the problem is at least as much one of lack of choice as of cultural resistance. A peasant woman will prefer to sell two eggs in order to buy rice; she may be able to feed five children with the rice, but not with the two eggs. As one of Latin America's best-known authorities on nutrition put it: "Dietetics does not teach how to earn the money necessary to buy better food."26 School meal programmes in Cuba, Costa Rica, the Dominican Republic and other countries have indicated that culturally determined dietary preferences can be rapidly changed. Sometimes, in fact, the free school meal has been the main reason why the child is allowed to go to school. Free milk programmes have also met with considerable success, though milk is not a common item in the diets which rural families give their children.

Frequently, commercial agriculture is directly responsible for the elimination of elements of variety in the traditional diet. In Puerto Rico, the expansion of sugar cultivation cut into local production of beef and cereals. It compelled the Puerto Rican labourer to buy rice produced in Louisiana or Java, and beef from the United States or Argentina. On smaller plantations, people are able to use herbs, legumes, and grasses growing among the plantation crops for food and fodder for a few domestic animals and fowls. When chemical herbicides are introduced, the herbs and grasses are killed off or carry poisons, and when the cultivation is intensified, there is often no available land for subsistence crops. This does not mean that the extension of efficient plantation agriculture need necessarily be harmful to the population involved; it does suggest that the effects of such changes on nutritional standards need to be studied and remedies applied.

To a large extent, rural Latin Americans and the poorer urban groups depend on strong beverages or drugs to compensate for the inadequacy and monotony of their diet. In many regions, black coffee with sugar is an important part of each meal; the food value is small, but it deadens hunger. Among highland Indian groups, alcohol, often in combination with coca, serves a similar function. Until recently, these substances were frequently dispensed as part of wages in many mines and plantations. Coca is said to anaesthetize taste and digestive nerves; the question of whether it causes seri-

ous harm if used in moderation is still in dispute,<sup>27</sup> but there is no doubt that its use coincides with malnutrition and the need to maintain working energy on inadequate diets.

#### HEALTH AND SANITATION

Latin-American health patterns follow the lines which are to be expected in an area of low life expectancies, low income levels, and predominance of rural workers and subsistence farmers. There are few available statistics on causes of death, except for the cities, since most rural deaths occur without medical attendance; but it is clear that tuberculosis, malaria, intestinal infections and parasites, venereal diseases, and various diet-deficiency diseases act in combination to weaken most of the rural population, as well as the poorer urban groups.

Yellow fever and other pestilential diseases, once major causes of death, have already been reduced to medical curiosities. DDT extermination of insect carriers, and new drugs that can be used to cure large numbers of people rapidly and inexpensively give promise of eliminating malaria and yaws. The complete elimination of debilitating diseases, however, demands not only further development of public health campaigns, construction of safe water supplies and sanitation systems, and health education, but radical improvements in levels of living: more and better food, more substantial and larger houses, shoes to prevent hookworm.

Medicine is one of the traditional high-prestige fields of university education, and in most Latin-American countries there are more graduates in medicine annually than in any other profession except law. Nevertheless, the number of medical doctors is small in relation to the populations concerned, and most of them remain in the cities, where they can hope for lucrative private practices or positions on the staffs of government hospitals or health services. The cities thus frequently have so many physicians in relation to the number of patients who can afford to pay fees that the competition forces some of them into other careers, while the rural areas have practically none. Thus, in one country it is reported that "almost two-thirds of the physicians are located in departmental capitals which, with their surrounding municipalities, contain about 12 per cent of the population. Slightly more than one-half of the municipalities have no physicians".28

The maldistribution and generally inadequate number of practicing physicians is due primarily to the low income levels of the rural population, who usually cannot support a physician in private practice at the standard of living traditionally suitable to his profession. Most rural villagers try to heal themselves and their children through a combination of domestic remedies and techniques with a few items purchased from the pharmacist in the nearest town. The pharmacist (who may or may not be trained) often gives medical advice and prepares remedies. Probably a significant portion of rural cash income is invested in such medicines.

<sup>&</sup>lt;sup>26</sup> Pedro Escudero, Alimentación, Buenos Aires, 1934, p. 253.

<sup>&</sup>lt;sup>27</sup> Cf. United Nations, Report of the Commission of Enquiry on the Coca Leaf, Special Supplement No. 1, May 1950.

<sup>28</sup> International Bank for Reconstruction and Development, The Basis of a Development Program for Colombia, p. 198.

Indian and peasant communities also have herb doctors and medicine men whose treatments are "usually a mixture of common sense and magic, practical knowledge and imagination".29 In general, these people do not consider modern medical care and their folk medicines and beliefs to be mutually exclusive. They seek out the native practitioner, take patent medicine, or go to a physician, if available, sometimes trying all three in succession. Indian and peasant customs present barriers to the physician, and the native practitioners are sometimes antagonistic to him, but in general, wherever medical facilities have been provided, rural populations have taken advantage of them.30 The combination of illiteracy, isolation and folk concepts of disease, however, make it difficult for the peasant, and even for the plantation and urban worker, to grasp the advantages of protected water supplies, sewage disposal, or elimination of flies and mosquitoes. Campaigns for the mass treatment of specific diseases are unlikely to have permanent results unless the people come to realize how the diseases are transmitted and how they can be prevented.

Such a change in attitudes, of course, demands a raising of the general levels of education. Health conditions are poorest in the countries with the highest rates of illiteracy.

Public health programmes aimed at the rural populations are now in operation in most Latin-American countries, and various expedients have been adopted to direct medical personnel to the villages. Mexico has developed a plan by which medical students are assigned to work in rural communities for a five-month period prior to receiving their medical degree. In El Salvador, internes serve in mobile medical units which give medical care and undertake preventive measures in rural areas.31 In Brazil, the federal government is co-operating with the states in setting up rural health posts and hospitals. Trained nurses, public health specialists, sanitary engineers and other auxiliary personnel, however, are much more inadequate in numbers than physicians,32 and the populations to be served are frequently thinly scattered over mountainous or lowland forest areas without roads. The low salaries usually paid to government public health personnel, combined with discomforts of living in isolated rural communities, make it difficult—as in the case of rural school teachers— to recruit them. Improved health services usually benefit first the urban groups and then the plantation and mine workers. As stated previously, it is relatively easy to supply services for these town-like aggregations of population under the control of a single employer, who is usually subject to some legal requirement to supply medical care. In El Salvador, plantations in a recently organized health demonstration area were found to supply medical examinations and services superior to those available to rural populations in the neighbouring area. The Bolivia, the larger mines supply free medical care, including care during pregnancy and the postnatal period, "superior to what the workers in many cities and towns of Bolivia are able to obtain with or without charge". The superior was a supply free medical care, including care during pregnancy and the postnatal period, "superior to what the workers in many cities and towns of Bolivia are able to obtain with or without charge".

Thus, the major health problems of Latin America result in large part from inadequate levels of income and consumption, lack of knowledge of the principles of contagion, overwork, too-frequent childbearing, as well as other factors only indirectly related to the etiology of the principal diseases. Public health measures and wider availability of medical care cannot be permanently successful unless they are accompanied by higher levels of living and education.

## EDUCATION AND LITERACY

Although statistics are incomplete, it is quite apparent that the lowest levels of education in Latin America are to be found in the rural districts. It is exactly in the areas where urbanization has taken greatest strides that the literacy rate is highest. Thus, Argentina and Uruguay, the two most urbanized countries in Latin America, have the highest rates of literacy.

The low rates of literacy in the rural areas of Latin America relate directly to the availability in general of educational facilities. They are related also to the lower income level of the rural people as compared to that of the urbanites; and in some regions of Latin America, especially in the regions of indigenous population, they are related to linguistic and cultural differences between the rural inhabitants and the urban population. In rural Latin America, a large proportion of the population lives scattered over the countryside, and the town or village is a centre to which people come periodically for marketing and for political and social reasons. Without roads and modern vehicles, transportation is slow and arduous. A school placed in the village or town might be several hours away for a rural child and even when schools are placed strategically in the countryside, they are near only a small part of the scattered homesteads. Latin-American governments have recognized this difficulty by exempting children living at a certain distance from schools from compulsory attendance. Furthermore, even where schools are available in rural districts, they usually offer only two to four years of instruction and are poorly staffed and equipped.

In addition, rural schools must compete with the family's need for the labour of its children and sometimes with a scepticism on the part of adults as to the practical benefits to be derived from such education. In an isolated peasant village or in a Peruvian Indian ayllu it may be difficult for parents to see the direct utility of literacy which they have not themselves found necessary in their normal pursuits. These difficulties, combined with others discussed in the chapter on Education in this report, make for a marked differential in the educational level and the literacy rates between the rural and urban populations.

<sup>&</sup>lt;sup>29</sup> The Haiti Pilot Project: Phase One, 1947-1949, UNESCO Monograph on Fundamental Education IV, pp. 28-29. <sup>30</sup> A small clinic opened in the Marbial Valley of Haiti, where previously no permanent medical care had been available, proved almost too successful; the doctor who attended once a week was unable to cope with all the patients who flocked to him for treatment. (The Haiti Pilot Project, op. cit., p. 58).

p. 58).

31 M. Roemer (Consultant, World Health Organization),

A Health Demonstration Area of El Salvador.

A Health Demonstration Area of El Salvador.

32 For example, in Brazil in 1949, only 170 graduate nurses registered their diplomas, despite the recent establishment of several new schools of nursing: a number totally inadequate for a country of more than 50 million people.

<sup>33</sup> Roemer, op. cit., p. 190.

<sup>34</sup> ILO, Labour Problems in Bolivia, Montreal, 1943, p. 8.

There has been a serious effort on the part of several Latin-American governments to make the programme of schools more directly pertinent to the life of the community. More stress is being laid upon teaching agriculture, hygiene and crafts, as well as upon reading and writing.35 Likewise, educational missions, such as those organized in Mexico, Bolivia and Guatemala, carry practical education to the rural zones (and in these cases, to the Indian populations), which not only reduces the illiteracy rate among adults, but breaks down resistance to the schools by showing adults the value of such education for their children.36

Although it may be said that Latin America has greater linguistic homogeneity than such areas as Africa, Southeast Asia and India, still language differences are a major barrier to the educational process. The high illiteracy rates of the large Indian populations are in part a reflection of the fact that they use languages other than the official. Thus, the problem of illiteracy in highland Peru or Bolivia, for example, is not comparable to that in rural Brazil, where, among people speaking an official language, it may be dealt with more efficiently.37

An important aspect of the general level of education in Latin America is the number and quality of vocational, technical and professional schools. Throughout Latin America the training of people for professions has traditionally been confined to medicine and to the law. Schools of agronomy, engineering, pharmacy and dentistry, as well as of vocational training of all kinds, are relatively new. Although in many cases such institutions now exist, some of exceedingly high quality, they are few in number. Considerable progress has been made in the last few years, but in most of Latin America the development of professional education is out-stripped by the growth of population in need of professional and specialized services. With increasing industrial development in many areas of Latin America and the growing urban trend, there is greater and greater demand for specialized workmen in industry, specialists in scientific agriculture, engineers, industrial chemists and vocational and professional people of all sorts. Furthermore, little can be done about the low literacy rates without many more trained teachers. It is notable that predominantly agricultural countries still graduate a great many more students in law than in the general field of agriculture and many more physicians than nurses, whose role in adequate medical care is

Although it is a fact that the existing technical schools in Latin America are generally flooded with applications for admission, additional facilities alone will not solve the problem. Only a small number of Latin Americans have the financial means to allow their children to continue school beyond the primary grades, much less to continue in specialized schools and faculties after secondary schooling. Thus, it is increasingly recognized that specialized schools must be organized on the basis of scholarships for students and

<sup>35</sup> ILO, Conditions of Life and Work of Indigenous Populations of Latin-American Countries, Geneva, 1949, pp. 33 ff. <sup>36</sup> ILO, op. cit., 1949, pp. 38 ff. <sup>37</sup> For further details, see chapter VI.

that the training of specialized labour must be undertaken by government or by private finance.

In addition, the great diversity in the ways of life and levels of living in Latin America afford obstacles to the efficient use of specialized workers, once they are trained. Thus, those who receive specialized agricultural training generally seek other types of employment or wish to become teachers.

In Latin America, as elsewhere, when people become technicians and professionals, they look to bettering their standard of living and to rising socially; this is not always possible in their home communities, or in localities where they are most needed. They frequently gravitate toward the cities where they seek "whitecollar" jobs and take their places in the growing urban middle class.88

# Problems of Security

Several of the Latin-American nations are noted for their progressive labour codes which set enforceable standards for working conditions, pay and social security for labour. The effectiveness of social legislation and services is increasing. "Statistics show that the percentage of total government expenditure devoted to social purposes has risen considerably in all countries. In addition, both employers and employees are investing more and more in various social security schemes."39 In general, however, labour legislation and social services do not as yet benefit the rural workers aside from those in some of the more highly-developed plantation areas. The lack of communications, the scarcity of trained administrators, and the great variety of situations under which the agricultural worker lives make application extremely difficult. In many haciendas and plantations labour practices are still based upon custom and traditional paternalistic relations between the owners and the workers. Several countries have laws which attempt to protect the worker on these estates; in Peru (1947), colono workers are freed from compulsion to buy in a specific store, services to the owner are limited, and the produce which is paid in the form of rent to the owner may not exceed 20 per cent;40 other countries have similar legislation.

Like the people living on the haciendas and smaller plantations mentioned above, most of the highland Indians and peasant cultivators depend for social security upon custom and upon traditional institutions—the family, the community or a religious brotherhood. In the Indian communities of the highlands of the west coast countries, labour is seldom organized on a wage basis and thus is not susceptible of control by the familiar type of legislation. There are co-operative work parties—exchanges of labour between kinsmen and neighbours—in which the entire family generally participates. As mentioned earlier, the community is often

ference of American States Members of the International Labour Organisation, p. 23.

10 ILO, Conditions of Life and Work of Indigenous Popu-

<sup>&</sup>lt;sup>38</sup> For a description of problems and developments in this field and detailed notes on national facilities, see ILO, *Voca*tional Training in Latin America, Studies and Reports, New Series, No. 28, Geneva, 1951. 39 ILO, Report of the Director-General to the Fifth Con-

lations of Latin-American Countries, Report II, Geneva, 1949, pp. 56 ff.

the landholding unit and its traditional control over the land offers a measure of security for the community members. Frequently, however, the available land per family is so limited because of population increase, or the production is so low because of the primitive system of cultivation in practice, that numerous members of the community are forced to seek seasonal (even permanent) employment on *haciendas* or in mines. Eventually, some of these families begin to sell their bits of land in violation of community tradition. As these Indian communities lose their land and as their members begin to depend upon employment outside the community, the strong sense of community cohesion begins to fade, and the traditional devices of social welfare no longer protect the people.

The situation of the numerous peasant subsistence farmers throughout Latin America in this regard is generally less favourable than that of the members of the landholding Indian communities. Like the Indians, the peasants tend to exist on the fringe of national life, despite the efforts of the various governments to bring them into closer touch with national affairs. The community is generally not a landholding unit, except in the many Mexican peasant communities where the ejidos (community landholdings) have been restored and adapted to modern conditions.<sup>41</sup>

The problem of insecurity of tenure and of title has been mentioned above. Without the strong cohesive organization of many Indian communities, without the paternalistic protection of the employer in the small haciendas and plantations, and generally without the legal codes which offer some protection to the workers in large commercial plantations, the small subsistence farmer is perhaps the least secure among all the rural population groups of Latin America.

These rural farmers, however, still retain certain traditional institutions and customs which offer them some measure of economic and social security. Latin-American culture is known for its emphasis upon familial relationships; it is customary to recognize kinship with cousins several degrees removed and with other distant relatives. Moreover, ritual kinship-among the godparents, their godchildren and the children's parents (the compadrazgo system)—adds to the large group of relatives by forming traditional ties of mutual aid between friends.42 This large circle of relatives, sometimes numbering over a hundred, and these ties of ritual kinship are often the principal means of social security for rural Latin Americans. Kinsmen lend each other money, supply food to tide one another's families over a difficult period, co-operate in work exchange, assist each other during an illness, and in numerous other ways provide backing to the individual and his immediate family.

In general, in many localities of Latin America, the traditional institutions and patterns of human relations

41 Cf. N. L. Whetten, Rural Mexico, Chicago, 1948, cited in Land Reform: Defects in Agrarian Structure as Obstacles to Economic Development, United Nations Department of Economic Affairs, 1951, pp. 60-61.

42 This traditional bond between compadres (i.e., between the

are gradually disappearing without being replaced by new bases for individual and group security. The tendency for the Indian comunidades to sell their land with resulting loss of community cohesion has been noted above. Similarly, as the subsistence farmer begins to produce for regional or national markets and his income is calculated more in terms of cash, traditional units of neighbourhood co-operation are likely to disappear. As plantations become larger and are administered by the employees of large commercial corporations, the relationships between the agricultural worker and his employer tend to become impersonal and more strictly economic. As communications improve, people move about more frequently, seeking to better their economic situation, and they are moving in Latin America from small towns into the great cities. In commercial plantations and in mining communities, there are numerous male workers who have come seeking temporary employment, leaving their families behind in agricultural regions. Such increased mobility and internal migration have modified the traditional family organization of many Latin Americans, bringing about a dispersal of relatives and a fragmenting of large kinship circles. As economic development penetrates the isolated rural areas of Latin America, social welfare services and the enforcement of labour laws and other forms of social legislation must be substituted for the older mechanisms of individual and group security, which will almost inevitably disappear. Economic development in Latin America is therefore marked by a break-down of customary social usages, and their replacement by a body of law and formal institutional practice. This transition is a difficult one, as it has been in other parts of the world, in which local populations may be bereft of traditional protection,

Another fundamental problem is that the peasant who becomes a plantation or mine worker, or who begins to plant commercial crops instead of subsistence crops, becomes highly vulnerable to international economic crises and market shifts. Since most of the countries concentrate upon only one or a few export commodities, a slump in the price of sugar, coffee, copper or tin may mean wage cuts or unemployment for thousands of workers—and at a time when the government concerned is suffering from declining tax revenues and least able to help them.

before social legislation is effectively extended to them.

The seriousness of these problems is being increasingly recognized in governmental plans and policies.

# LACK OF COMMUNICATIONS AND TRANSPORTATION

One of the most crucial problems affecting social development in Latin America is the lack of an adequate system of communications and transportation. As stated earlier, it seriously hampers the improvement of the educational level of the rural populations. It is also one of the reasons for persisting poor health and malnutrition; without communication and transportation, health facilities and medical attention cannot be provided, and an efficient distribution of food supplies from surplus areas to deficit areas is impossible.

In most Latin-American countries, there are extensive territories isolated from the economic and cultural centres. In these territories, manufactured articles are

<sup>&</sup>lt;sup>42</sup> This traditional bond between *compadres* (i.e., between the godfather and the godchild's parents) also cements relations between employer and employee and between land owners and the workers and sharecroppers on their land, in many areas of rural Latin America.

expensive, food commodities are limited mainly to those locally produced, and educational and health facilities are generally inadequate. One of the central needs is to bring such isolated areas and their populations into the orbit of the economic and social life of the nation.

Environmental factors have decidedly limited the spread of transport and communication facilities. Yet the prime obstacle is not environmental, but economic; wherever and whenever successful economic use of a key area has seemed possible, avenues of transportation and communication have developed.

Adequate transportation and communication facilities are essential to provision of institutionalized services of all kinds. But such facilities do not spring up by themselves, and their costs can rarely, if ever, be borne by local populations. Road repair may be carried out co-operatively, as in the case of the *comunidades* of the Andean highlands.<sup>43</sup> Or governments in countries where the co-operative labour tradition is strong may be able to foster collective work projects to improve roads, build bridges and other means of communication. But, by and large, modern means of transportation—roads, railroads and modern vehicles—must come as the result of economic development in pioneer areas, coupled with the governmental extension of controls and services into these newly-opened zones.

Various types of mobile health, educational, religious, agricultural and medical units are found to a limited extent. Such mobile units are probably the best technique for extending service to outlying rural areas, at least until it is possible to establish permanent centres.

Although Cuba is better off in respect to communications than almost any other Latin-American country, the observations of the Economic and Technical Mission organized by the International Bank for Reconstruction and Development stress the importance of transportation in these terms: "perhaps the most pressing need . . . is the development of an adequate network of farm-to-market roads . . . there are very large areas in Cuba where commodities produced in one locality cannot economically be marketed even in neighbouring towns simply because no roads of any description exist ... The social consequences of inadequate local roads are probably no less serious: the isolation of individual farms and of whole communities not only tends to induce intellectual and social stagnation in those who are isolated but also promotes the migration of people from areas of high potential productivity to areas already experiencing overcrowding and unemployment."44

#### Conclusion

The insecure patterns of tenancy and ownership of land, the unequal distribution of land and the inefficient methods of cultivation are serious barriers to a higher standard of living for large segments of the rural population. As the Economic and Social Council has recognized, appropriate measures of land reform designed to improve the conditions of rural populations and to increase agricultural production must, in many countries, be regarded as a necessary part of any effective

implementation of comprehensive programmes for economic development. Mexico, and, to a more limited extent, some other Latin-American countries, have already advanced in this direction. At the same time, as the recent report on land reform observes: "Many of the benefits which might be expected to result from reform of the tenure system will be nullified if steps are not taken to provide appropriate services and facilities to the newly established small farmer . . . credit facilities, co-operative marketing, advisory technical and health services are among the major services and facilities needed." 46

Up to the present, in most Latin-American countries, the sector of the economy associated with "monoculture" —production of a few raw materials and "dessert" crops for foreign consumption—has increased in productivity and permitted improvements in income and social services, while the greater part of the rural economy has lagged behind. Commercial plantations, mines and other large enterprises have often benefited considerably from mechanization and modernization but, in general, the small peasant farmers, who grow food for local consumption, have not. These rural majorities, producing only small food surpluses for sale, have low consumption levels and buy very few marketed consumers' goods. To apply measures for the adoption of efficient agricultural methods, the improvement of social conditions and the raising of consumption levels among the small-scale peasant farmers, is a difficult but fundamental task. If export agriculture and industry continue to expand without corresponding increases in food production and if agricultural self-sufficiency continues to decrease, most Latin-American countries may become even more vulnerable to the vagaries of the world market economy; and the recurring periods of economic crisis, may become even more intense as the rural countryside is unable to absorb and support, after a fashion, the surplus labour of mines and plantations in periods of world market contraction.

In general, it must be noted that improvement in living conditions of most Latin Americans involves a series of closely related problems. Poor health and inferior diet result in low productivity. The cultivator works with primitive equipment, by outmoded techniques, and often with insecurity of tenure or ownership. The low level of education limits the supply of skilled workers for expansion of industry. Some Latin-American values and attitudes—particularly the low status accorded manual labour-are barriers to good labour-management relations and to the formation of a body of skilled labour, since a man who has attained some education seeks a white-collar job to raise his social standing. Lack of transportation facilities contributes to the inability to enforce social legislation, to the difficulties of providing educational and health services, and to the high costs of consumers' goods and low returns to the small producers. The low standard of living of most Latin Americans must be understood in the light of these diverse causes; only by a unified programme of economic and social improvement can the general level of income and consumption be raised.

<sup>&</sup>lt;sup>43</sup> ILO, Conditions of Life and Work of Indigenous Populations of Latin American Countries, Report II, Geneva, 1949, p. 61.

p. 61.

44 International Bank for Reconstruction and Development,
Report on Cuba, p. 274.

<sup>&</sup>lt;sup>45</sup> United Nations, Economic and Social Council, 13th Session, Official Records, Supplement No. 1: Resolutions, pp. 10-14. <sup>46</sup> Land Reform: Defects in Agrarian Structure as Obstacles to Economic Development, New York, 1951, p. 90.

# Chapter XI

## SOCIAL CONDITIONS IN THE MIDDLE EAST

### Introduction

The Middle East, as defined in this report,¹ comprises a land area of nearly 10 million square kilometres, connecting Africa, Asia and Europe, and having a population of approximately 106 million. The political boundaries of this region are not exactly conterminous with the limits of Middle Eastern cultural or socio-economic life. Thus, the southern part of the Anglo-Egyptian Sudan belongs to the so-called "East African Cattle Area"; Cyprus and European Turkey have much in common with Southeastern Europe; while characteristic Middle Eastern ways of life extend into Northern Africa and South-central Asia, beyond the scope of the present discussion.

From remote antiquity, the Middle East has served as a highway linking together the three continents. It is the birthplace of the world's earliest recorded civilizations, of monotheistic religions, the art of writing and many other major cultural developments without which "Western" civilization would be unthinkable.

A region with such an ancient and diversified historical background naturally exhibits important variations among its constituent parts. Yet underlying these differences is a basic unity which is also the product of a long historical process. From earliest times, the river valleys of Egypt and Mesopotamia radiated their civilizations to neighbouring lands. Conquests, migrations and large-scale deportation of populations diffused religious and cultural patterns throughout the region. For over 1,000 years, the greater part of the Middle East was politically unified, under the Persian, Macedonian and Roman empires. During the first six centuries of the Christian era, most of the region was subjected to the influence of Christianity, which gave it a greater degree of cultural unity than it had experienced before. In the course of the following two centuries Christianity was replaced by Islam, which constitutes today the main factor of cultural unity.

Approximately 90 per cent of the population are Moslems; 4 per cent are Christians (divided among several denominations); less than 2 per cent are Jews; 2 per cent (in the southern Sudan) belong to African tribal cults; most of the remainder belong to semi-Moslem sects. All the political units in the region excepting three of the smaller ones (Cyprus, Israel and Lebanon) have Moslem majorities. Together with its religious beliefs and practices, Islam brought with

it a legal code, the Sharia, which until recently regulated almost all aspects of life of the Moslem communities and many activities of non-Moslems. It still exercises a deep influence on Middle Eastern society. Islam also helped to unify the Middle East by diffusing the Arabic language, which for several centuries constituted the sole linguistic medium of science and literature, and until very recently was likewise the official language of religion and of the law throughout the region. Moreover, the three most widely-spoken languages of the region—Arabic, Persian and Turkish—have interpenetrated each other to a marked degree and, as recently as fifty years ago, a knowledge of two or three of these languages was widespread among the educated classes.

Upon this relatively homogeneous Islamic society, the impact of modern Western civilization has been, with local variation, both marked and progressive since the end of the eighteenth century. The countries in which Western influence first made itself felt, and in which it penetrated most deeply, bordered on the Mediterranean: Turkey, Egypt, Palestine and Lebanon. The countries of the Arabian peninsula, on the other hand, have experienced the impact of the West only during the last two or three decades. This has introduced an important element of diversity into the region which makes generalization extremely difficult.

Moreover, Westernization has in no country affected all classes equally. Even where it has penetrated deepest, its influence tends to be much stronger in the urban areas and in the upper and middle classes.

These classes (particularly the upper class) already approximate the Western World in respect of birth and death rates, life expectancy, housing, food and clothing, medical services, education and other similar characteristics. The great majority of the population, on the other hand, and especially the three-quarters of the people who live in rural areas, still largely continue to live according to patterns that were developed in the Middle East many centuries ago. This chapter is devoted primarily to a study of the conditions in which this great majority of the people live; it should ever be borne in mind, however, that in practically all Middle Eastern countries there is a small, but rapidly increasing and very influential, segment of the popultion to which the statements made do not generally apply.

It must also be noted that Israel differs widely from the region as a whole, not only because of traditional religious-cultural differences between Moslems and Jews, but also because of the effects of recent immigration, particularly the immigration of European middle-class professional families. An outstanding and highly significant feature of other Middle Eastern countries is their lack of a professional middle class. The resulting situation is that Israel has, for example, the largest number of physicians for the size of its population of

<sup>&</sup>lt;sup>1</sup> For brief notes on definitions of the Middle East, see United Nations, Research Memorandum No. 10. Division of Economic Stability and Development, Department of Economic Affairs; and Review of Economic Conditions in the Middle East, Supplement to World Economic Report, 1949-50. The present chapter follows the latter report in its definition of the Middle East, the major countries considered being Afghanistan, Anglo-Egyptian Sudan, Egypt, Iran, Iraq, Israel, Jordan, Lebanon, Saudi Arabia, Syria, Turkey and Yemen, together with the smaller territories of the region.

any country in the world (one physician for every 380 inhabitants, although many of the physicians are now advanced in age), while in other countries of the Middle East, the gravest shortages of physicians are to be found (e.g., Iran has only one doctor for every 63,000 inhabitants). This chapter will not attempt to discuss the social problems peculiar to Israel's position, many of which are related to the immigration to that country.<sup>2</sup>

Geographically, the Middle East is characterized by a basic dichotomy between desert and sown. Over 90 per cent of the region is desert, or at best grazing steppe, with great extremes of temperature, almost no rain at any time of the year, and a very scanty vegetation of low grasses and drought-resistant bushes. The narrow sown tract is, generally speaking, Mediterranean in character, having long, hot, rainless summers; rainy, temperate winters; and a native vegetation ranging from grass to open deciduous forests. The transition from the desert to the sown, as a rule, is gradual, with the notable exceptions of the two great riverain zones of the Nile and the Tigris-Euphrates valleys, where it is abrupt and clearcut.

The peoples of the Middle East, in their adaptation to their physical environment, largely conform to this basic regional dichotomy between desert and sown. The desert, where the only feasible mode of existence has been that of the wandering herder, has served for centuries as the home of nomadic, animal-breeding tribes. The sown, with its very different physical conditions, has for at least as long been the abode of the settled cultivators. The remaining populace live in towns, some of which can boast an uninterrupted history of several thousands of years.

About 20 per cent of the region as a whole is composed of urban population (definitions of "urban" vary widely), about 65 per cent is composed of settled rural population and about 15 per cent is composed of nomadic or semi-nomadic peoples. The urban populalation is estimated to be no more than 10 per cent in Afghanistan, Anglo-Egyptian Sudan and the Arabian Peninsula, but 40 per cent in Lebanon and 50 per cent in Israel. The nomadic and semi-nomadic population ranges from 0 per cent (Cyprus, Egypt, Lebanon) to 33 per cent in Afghanistan and the Arabian Peninsula and 40 per cent in Jordan.

Living conditions vary somewhat from one nomadic tribe to another, and even more appreciably from one settled area to another; yet these differences (as between tribe and tribe, village and village, town and town) seem superficial indeed when juxtaposed to the profound differences which separate the total living conditions of each type of community from those of the others. These dissimilarities are so pronounced that demographic, social, economic and cultural characteristics, which are expressed statistically in national or regional averages, have little meaning unless they are immediately followed by a breakdown of each figure according to the aforementioned three major population

types. At present, however, statistical data from the Middle East as a whole are sporadic, inadequate and unreliable, while figures relative to any specific type of community in most cases simply do not exist. This chapter, therefore, must rely in good part upon a descriptive account of social conditions and trends in the major types of community to which the Middle Eastern peoples belong.

The Middle East is, in general, an area of high birth rates; death rates, while still very high, have been partially controlled, resulting in rates of population increase of ten to twenty per thousand a year. High rates of increase are derived in part from the virtual elimination of famines and pestilential diseases, such as cholera and plague, which until very recent times periodically decimated the population; and from decreases in infant and child mortality, although rates are still very high in comparison with those of more economically developed countries. Thus, in Egypt, for example, which has more facilities for child care than most of the other Middle Eastern countries, one child out of three dies before reaching his fifth birthday.<sup>3</sup>

Both general conditions and social attitudes appear to favour the continuation of high birth rates for some time to come. These conditions and attitudes include the overwhelmingly agrarian structure of society, the isolation and illiteracy found in wide parts of the region, the traditional family pattern (the extended family), the widespread desire for heirs, especially male heirs, and the absence of economic incentives to limit the number of offspring.

# THE MIDDLE EASTERN NOMAD

The nomads of the Middle East can be divided into three major types. The "true nomads", or camel nomads, whose main livestock consists of herds of camels (the one-humped dromedary), engage in seasonal migrations with their herds within a definite though extensive wandering territory: in the dry summer months near the steppe-belt which, in most places, separates the true desert from the land inhabited by settled agriculturalists; and in the cooler and wetter winter season far out into the heart of the desert. The camel is the main source of livelihood of the true nomad. Its milk, usually soured, is his staple food, for several months of each year his only food, varied at long intervals with a feast of camel's meat. Its hair, mixed with that of goats, supplies him with raw material for weaving tent cloths and clothing. Its skin is used for the production of leather utensils and trappings; its bones serve as implements; and its droppings are dried and burned as fuel. In addition, the camel was, until the recent introduction of motor vehicles, the only means of transportation in the desert, carrying the nomad and his baggage from one well or water-hole to another.

In addition, all over the Middle East, so-called "seminomads", also known as sheep or goat nomads, can be found, occupying much smaller wandering territories, nearer the steppe and the cultivated regions. A third kind of nomadism, called "transhumance", is practised

<sup>&</sup>lt;sup>2</sup> Omitted from this chapter, but taken up elsewhere (see chapter VIII) is the problem of the Palestinian Arabs who became refugees as a result of the war between the Jews and the Arabs.

<sup>&</sup>lt;sup>3</sup> Cf. United Nations Social Welfare Seminar for the Arab States of the Middle East, Cairo, 1950, p. 298.

sporadically over the mountainous areas, most typically and generally in the Iranian Plateau region. This is a kind of "vertical" nomadism (as against the "horizontal" nomadism of the deserts and the steppes); the tribe spends the summer in the mountains and the winter in the lower levels of the plateau or in the valleys within the area.

Characteristic of all the nomads of the Middle East is the black hair tent, the only shelter used by them, which is moved from one encampment to another. The wandering unit, which camps and moves together, is the basic social entity in nomadic society, functioning as a closed, independent and homogeneous group, and led by a *sheykh* and a council of elders.

Under traditional conditions, which prevailed in most parts of the Middle East up to about fifty years ago, nomadic economy was founded on the direct utilization of the camel or of sheep and goats; on the sale of surplus animals or the surplus products of animal husbandry; on income in cash or kind derived from the brotherhood-money (the so-called khuwwa) paid by lesser tribes and by settled folk for protection and safety from attack; and on the loot brought in by frequent raids or gained in the course of intertribal warfare. During the last few decades, however, raiding and warfare have become almost impossible due to the stronger policing of the outskirts of the deserts and ruthless retaliatory measures resorted to by the central authorities. A direct outcome is that the weaker tribal and village groups no longer feel the need of paying khuwwa. With the introduction of mechanized transportation across and along the deserts, the market demand for camels has dropped very considerably, causing an almost catastrophic (from the point of view of the Bedouin) drop in the price of camels. A nomad who could sell a camel a year was a wealthy man fifty years ago; today he is a poor man. The camel remains valuable as a source of direct utilization, but has become almost valueless as a source of cash incomeand this at a time when, as a result of the increasing penetration of modern utensils, implements, clothing articles, etc., into the desert, the need for cash is more acutely felt than before.

There are three ways out of this economic quandary and each involves a loss of status and prestige for the nomad, causing serious disturbances in the socio-cultural equilibrium of traditional nomadic society. The one that involves the least drastic change is the gradual diminution of the numbers of camels owned by the tribe or the wandering unit, and the corresponding increase in the numbers of small flock, such as sheep and goats. The market for the latter animals and their products (milk, cheese, hair, etc.) is practically as good today as it was half a century ago. Several true nomadic groups have, reluctantly, become sheep and goat herders.

The second way out is for the nomad to give up his independent existence and become a jobholder. Many Bedouin have entered the service of their government and enlisted in the police force or in the army (e.g., the Arab legion of Jordan). Others have found employment in the oil companies.

The nomad's third way out of his economic difficulties is to become a settled cultivator, which, for him, means to become "a slave of the soil". A spontaneous movement towards "sedentarization" has been going on in the Middle East from the earliest historical times, but it has become intensified since the beginning of the twentieth century. The Jezirah district, between the Tigris and Euphrates rivers in northeastern Syria, was, up to the First World War, inhabited almost exclusively by nomads and semi-nomads, but by 1948 it contained some 1,600 villages and towns with a majority population consisting of settled farmers and townspeople. A study conducted in the Khiss-Finn Camp in Syria in July 1949, among Arab refugee villagers who came from Upper Galilee in Palestine, showed that a considerable number of these people had settled in villages in Galilee not longer than fifty to seventy years ago, having previously been nomadic herders (Bedouins).4 Similar processes have taken place in Iran, Iraq, Jordan, eastern Turkey and around the oilfields of the Arabian Peninsula.

The transition from a nomadic to a settled mode of existence entails not only a basic change in the economic and occupational aspects of life, but also in the entire social structure of the community. Tribal traditions, and the tribal social structure, remain alive for a considerable time, as well as the ideal of nomadism, to which the tribe may strive to return if and when opportunity arises—as was demonstrated on several occasions among the major tribes of Iran, forcibly sedentarized by Riza Shah. On the other hand, the mere fact of taking up the occupation of settled cultivation introduces a new element, the class structure, which appears in conjunction with economic inequalities arising in the course of sedentarization. The decisive step in this process is the occupation of land by each extended family for its own exclusive use (in nomadic society the total area of the tribal wandering territory is owned by the whole tribe in common). Experience shows that the tribal sheykh and other powerful members of the tribe often obtain the better and larger tracts of land, while the remaining members have to content themselves with small and inferior plots, or are even excluded altogether and have to become tenant farmers or share-croppers on the land of the sheykh. (In the transition to private ownership, the sheykh may register tribally-owned lands in his own name for the tribal group and become thereby the legal owner.) In the nomadic stage wealth is fluid, and differences in status and influence are powerfully counteracted and neutralized by the traditionally upheld ideal of equality and brotherhood within the tribe; the ills deriving from the social and economic inequalities characteristic of so many Middle Eastern villages are thus engendered at the very moment when the nomadic tribe settles down to permanent cultivation.

In several cases, especially in Iraq, Syria and Saudi Arabia, efforts have been made by the governments to induce nomadic tribesmen to settle down. Of these, the most significant government-sponsored movement is that of the Ikhwan in the Nejd region of Central Arabia, where entire tribes, which were previously camel-breeding nomads, were settled into villages clus-

<sup>&</sup>lt;sup>4</sup> Cf. United Nations Social Welfare Seminar for the Arab States of the Middle East, Beirut, 1949: Social Survey of the Khiss-Finn Camp, document no. ME/3 S/20.

tering around fertile oases in the desert. The efforts of the governments to settle their nomadic tribes are to a great extent due to the fact that the nomadic elements constitute a potential or actual source of friction, unrest and disturbance in the country. Iranians well remember the bloody clashes that took place between the armies of Riza Shah and some of the major tribes, such as the Lurs, who were unwilling to give up their old traditions of independence .

The peaceful settling of nomadic tribes can become an effective preventive of internecine warfare, as well as a constructive solution of the economic difficulties of the tribes themselves. On the other hand, the view has often been expressed that, because of the climatic and geographical conditions of the Middle East, it is not desirable to have all the nomadic tribes settled and thus have the major part of the land entirely unused and uninhabited.

The nomadic tribes of the Middle East are good examples of a society where it is difficult to assess "standards of living" according to norms evolved elsewhere, particularly norms evolved in a sedentary urbanindustrial society. Nomadic societies lack schools, newspapers, doctors, hospitals, police, law systems, etc., in fact, are deficient in practically every social instrumentality generally considered necessary to ensure a decent standard of living. Yet, their way of life does exhibit clear-cut and well-established adjustments to their environment, often complex in nature, and, with its highly developed folk culture, provides satisfactions that may not be measurable by the standards of other peoples in quite different environments.

## THE MIDDLE EASTERN VILLAGE

The most typical way of life throughout the Middle East (see p. 149) is that of the agricultural village. With few exceptions (for example, fishing villages on the coasts of Arabia, marsh villages in southern Iraq), the settled villagers are cultivators of the soil. For thousands of years, the villages have been the foundation stones of Middle Eastern life, barely supporting their own inhabitants while providing the food and luxuries consumed in big cities.

## The village environment

The bulk of the agricultural population lives in dire poverty and in extremely insanitary conditions. Most of the villages are tightly packed conglomerations of buildings with no sewage system and with no more adequate water supply than a single spring or well, which is often situated at some distance from the village, and the water of which is frequently polluted. The problem of water shortage (which lies at the basis of the nomadic way of life) is a critical one for living standards in Middle Eastern villages, not only because it limits agricultural production and is conducive to disease—the wide prevalence of eye and skin diseases is attributed in good part to the lack of fresh waterbut also because it may involve a serious cost affecting the peasant's real income. In some areas, water rights are owned separately from, or in addition to, the land, and the peasant share-cropper has been traditionally obliged to give up to one-fifth of his crops in return for water supplied by the landlord.

The peasant family lives in a single one- or two-room house built of the raw material available in the district (stone, mud, reeds, etc.). The need for heating facilities is felt chiefly in the more northerly latitudes and above a certain elevation; but fuel supplies are scarce and expensive. Manure, in the form of kneaded and dried dung cakes, is widely used as fuel for heating and cooking, a practice which deprives the soil of muchneeded natural fertilizer.

The typical Middle Eastern village possesses some traditional institutions which, at present, are being brought increasingly under the control, or at least the influence, of the government. The village guest-house (madif in Arab lands, Koy Odasi in Turkey, etc.), found in many but by no means all villages, serves both as a place for the entertaining of guests and as a gathering-place for the villagers themselves. In Turkey, these guest-houses have in many instances been either replaced or supplemented by the more recently established "people's houses" (Halk Odalari). In the larger Middle Eastern villages, there are also usually a number of coffee-shops, and, in some cases, a communal bath.

Another important traditional village institution is the mosque, or in Christian villages, the church. Most villages possess one or more mosques, and, in some cases, also a church. The mosque is under the care of a sheykh, or religious leader, who usually exercises considerable influence over the beliefs and attitudes of the villagers and who teaches the children attending the Koran-school housed in the mosque. In many cases, the sheykh owns and works land like any other peasant.

Still other institutions which afford occasion for the villagers to meet and function together are the communal threshing floor, which is also the scene of village festivities; and the village well or spring, which is a meeting centre, especially for the women.

### Social organization

The forms of social organization in the village depend on several factors, of which the most important are the size of the village and the history of its inhabitants. Many of the smaller villages are inhabited by various families all of whose members are related to one another and regard themselves as the descendants of one common ancestor who first established the village. Larger villages may contain two or more such family groups, between whom there may be a certain amount of rivalry.

The chief of one of these family groups is, as a rule, the village headman, whose pre-eminent position, traditionally based on his headship of a leading family, is latterly undergoing a transformation as a result of which he must now frequently be elected by the villagers and confirmed by the government, or else be appointed directly by the government. The headman is usually economically better off than the average villager and has considerable influence and prestige in the village. Assisted by a council of village elders, the headman does the administrative work in the village, has in many cases limited jurisdiction to resolve small disputes, and is the intermediary between the village and the government. On the one hand, he represents the interest of the village vis-à-vis the head of the district

to which the village belongs; on the other hand, his duty is to enforce government orders, to assist the tax collector in his work, and to exercise a general responsibility for the village to the government.

The extended family, consisting of an elderly male head and all his male descendants and their wives, plus unmarried females, is the norm in the Middle East. It is most firmly established in the villages and among the nomads, although it likewise survives, in a modified form, in the cities. The extended family is the basic unit of Middle Eastern economy. In the village, it owns and works the land jointly. (In the nomadic tribe, it holds the flocks and herds in common, and in the cities, it often carries on in common a traditional industry or a commercial enterprise).

The women marry early—usually at the onset of sexual maturity or even earlier; the number of unmarried adults, male or female, is very low. Polygamy is permitted in Islam with certain restrictions; however, not more than 5 per cent of the married men of the region as a whole have more than one wife at a time. Although veiling is not practised in the villages, and women have traditionally worked in the fields along-side their menfolk as well as in their households, segregation of the sexes remains the rule.

As long as the family lives together and earns its livelihood together, and as long as the property of the family is held and controlled by its head, paternal authority is strong, and the career of the young people is clearly cut out for them along traditional lines. Each succeeding generation continues the occupation handed down to it by its predecessor: animal husbandry in the nomadic tribe, cultivation in the village, and a trade or arteraft belonging to the "old industries" in the towns.

In traditional Middle Eastern society the family is thus the principal social structure within which the individual must fit closely and to the control of which he must submit. When this control is weakened by village-to-town migration, industrialization, employment on an individual basis, growing governmental control, etc., serious disturbances in social and psychological equilibrium may ensue. The replacement of family and paternal authority by more impersonal social forces (government, public opinion), and at the same time by more personal individualistic forces ("self-determination", "self-reliance"), is rarely a smooth process, and is often fraught with dangers of maladjustment.

# Land and income

The income of the Middle Eastern villagers is determined essentially by what they derive from the land, plus minor supplements from livestock and from some handicrafts. The actual levels of personal income and consumption of the agricultural village populations have never been systematically measured, except for a few surveys of doubtfully representative villages; but they are generally known to be extremely low. Per capita national income has been estimated at \$100 or less for most countries of the area in 1950 (over \$400 for Israel, however, and over \$100 for Lebanon and Turkey), yet these estimates do not take account of the very wide differences in income of different groups—

differences, for example, between large landowners and peasants, which arise from the fact that a single landowner may receive as much as half the crops produced by a great many peasants. Some observers believe that rural living conditions have not improved, and possibly have become worse, during recent decades. Studies by the Fellah Bureau in Egypt have shown that, in 181 villages, rents had risen in 1944-45 by 242.5 per cent in relation to 1938-39 rents, while income from the main crops had risen 230 per cent. The FAO estimates that, since the Second World War, the region as a whole has exceeded prewar food production by about 10 per cent, but that the population has increased faster, and per capita food production has therefore decreased slightly.<sup>5</sup>

Some of the causes of low per capita productivity, low income and low consumption in the Middle East are common to the region as a whole; others are peculiar to certain countries. Egypt, for example, is particularly affected by the problem of population pressure on the arable land; productivity per unit of land there is high, but productivity per person is low. This can be illustrated by contrasting the agricultural situation in Egypt with that in the highly mechanized United States. The following table compares the productivity of agriculture per unit of land for a number of major crops.<sup>6</sup>

|                 | Yield per hectare<br>in Egypt<br>1949 | Yield per hectare<br>in the United States<br>1949 |
|-----------------|---------------------------------------|---|
| Crop            | (100 kg/hectare)                      | (100 kg/hectare)                                  |
| Wheat           | 19.6                                  | 10.0  |
| Barley          |                                       | 13.0  |
| Maize           | 19.9                                  | 24.4  |
| Rice            | 39.6                                  | 24.7  |
| Cottonseed      | 9.8                                   | 5.4   |
| Cotton (ginned) | 5.5                                   | 3.2   |

For most major crops, production per unit of land in Egypt is significantly greater than in the United States. But this fact must be viewed in conjunction with the following statistics on ratio of population to land.<sup>7</sup>

|  | Egypt<br>(1949) | United States<br>(1949) |
|--|-----------------|-------------------------|
| Total population                               | 20,045,000      | 149,215,000             |
| Agricultural population                        | 14,000,000°     | 27,488,000°             |
| Hectares of arable land                        | 2,445,000       | 184,129,000             |
| Hectares per capita of total population        | .12             | 1.2                     |
| Hectares per capita of agricultural population | .17             | 6.7                     |

<sup>&</sup>lt;sup>a</sup> Estimated on the assumption that approximately 70 per cent of the population is agricultural.
<sup>b</sup> Persons living on farms in 1948.

There is about ten times as much arable land in the United States per person as in Egypt, and nearly forty times as much per person of the agricultural population. (This does not take into account the permanent meadows and pastures and other lands potentially cultivable in the United States, none of which exist to any

<sup>6</sup> Based upon data in FAO, Yearbook of Food and Agricultural Statistics, 1950.

<sup>7</sup> Based upon FAO, Yearbook of Food and Agricultural Statistics, 1950.

<sup>&</sup>lt;sup>5</sup> Cf. Report on the Second Near East Regional Meeting on Food and Agricultural Programmes and Outlooks, FAO document 51/11/3177. (It should be noted that the FAO's use of the phrase "Near East" covers a somewhat larger area than the "Middle East" as defined in the present report, including, for example, Eritrea and Ethiopia).

great extent in Egypt). The intensive cultivation of the arable soil in Egypt by many farm workers, and the richness of this soil, produces a higher yield per hectare than is achieved through mechanized farming in the United States; nevertheless, the yield per unit of land in Egypt would have to be forty times greater than in the United States in order to produce the same income in terms of production per person. Moreover, it may be anticipated that Egypt's death rate, which is now relatively high but declining, will be significantly reduced in the near future through public health measures, and that the already dense agricultural population will become even denser, since there is no evidence that the birth rate will decline correspondingly in the near future.

Quite clearly, then, Egypt's difficulties cannot be resolved without a major attack upon the problem of land-and-population.

On the other hand, the Middle East region as a whole is not land-starved. There is, for example, a fair amount of cultivable but, as yet, unused land in Iran and Iraq; yet the rural poverty in these countries is little different from that of Egypt. According to FAO estimates, the amount of unused land that can be potentially brought under cultivation in the region as a whole is twice the amount now cultivated. In such countries as Turkey, Iraq, Syria and Saudi Arabia, very considerable expansions of cultivated areas have actually taken place in recent years. But the rate of expansion has not in general kept up with the rate of population growth.

Much of the land now under cultivation, moreover, has become seriously and progressively eroded (partly because of the eating habits of the many free-ranging goats in the area), and conservation and irrigation are crucial needs.

The type of land tenure system prevailing in large parts of the Middle East has been widely commented upon as a reason for low productivity and low income of the agricultural villager. Much of the land is owned by a small number of wealthy families who commonly live in the towns (and who do not usually run centrally-organized estates but let out separate pieces of land to tenants or middlemen). A great many of the villagers are tenant share-croppers, others own such small plots that they must seek additional land on a share-cropping basis or work part-time for wages on large properties, in order to maintain themselves at even a subsistence level. By tradition and law, land is subdivided among heirs, and this has meant more and more families on minimal plots and a growing body of landless labourers.

The unequal distribution of land, as well as the heterogeneous forms of tenure found in the Middle East, result from historical processes, some going back to the Ottoman conquest or earlier. Available statistics give a very imperfect picture of the numbers of large land-owners, smallholders and landless peasants, and the relative importance of the different holdings.

In Iran, about 50 per cent of the claimed land reportedly belongs to some 100,000 large landowners; about 15 per cent is in small holdings; and 35 per cent is in State domains or religious endowments (waqfs).

Here, and in neighbouring Iraq, which also has highlyconcentrated land ownership, much of the land is leased by the owners to middlemen, usually town dwellers, for fixed rents, which the latter collect along with their own profit from the peasant who actually works the land.

In Syria, only 30 per cent of the agricultural workers are reported to be independent peasants. In Egypt, while most peasants possess land, only a minority can and do make a living from their own land. In 1947, 11,000 landowners with 50 feddans (21 hectares) or more owned 36.8 per cent of the cultivated area of Egypt; 143,000 owners with 5–50 feddans (2.1–21 hectares) owned 29.7 per cent; 587,000 owners with 1–5 feddans (.42–2.1 hectares) owned 20.4 per cent; and 1,921,000 owners with 1 feddan and less owned 13.1 per cent.<sup>9</sup> The last-mentioned group, 70 per cent of the total number of landholders, hardly have enough land for the maintenance of a family. Together with a large class of landless rural workers, they compete for poorly paid estate labour or lease land on onerous terms.

The prevailing land tenure systems with their topheavy ownership are considered to have a depressing effect upon the peasant's income both directly and indirectly: directly, because a large proportion of the fruits of the peasant's labour goes to a landlord (or middleman) who usually contributes little in labour or managerial skill to the production (the landlord's share of the crops varies according to local circumstances, but is frequently 50 per cent or more; rents that are in cash, as in Egypt, may approach 50 per cent of the market value of the crops, with the peasant bearing the major expenses of cultivation); indirectly, because the psychological atmosphere for improvement of land, conservation, etc., is lacking, particularly if, as is quite common, there is little or no security of tenure and owners shift tenants from one plot to another at will.

It is important, however, to note that, as in the case of land shortage, inequality of land ownership does not fully explain low standards of rural income throughout the Middle East. Turkey, for example, has traditionally been a country of independent farmers, without excessive concentrations of ownership.10 Turkey, moreover, does not generally suffer land shortage (and a Government Act was introduced in 1945 to help the existing landless and those with undersized plots to obtain land). There is also extensive individual ownership or smallholding in Lebanon, although many large estates have arisen as a result of the chronic indebtedness of the peasants. Yet, rural incomes in these countries, while probably higher than the regional average, are extremely low, and, of course, are in no sense comparable to those in an economically developed area like England (where most of the arable land is held under tenancy, highly regulated by law).

A significant proportion of the land in the Middle East is permanently immobilized in the form of waqfs

<sup>8</sup> FAO document 51/11/3177.

<sup>&</sup>lt;sup>9</sup> Economic and Social Council document E/2003/Rev.1, p. 9. <sup>10</sup> According to studies recently made by the Turkish Preparatory Commission of the Land Law, estates of more than 5,000 donums (one donum is equivalent to one-tenth of a hectare) numbered only 418 and accounted for only 3.7 per cent of the total area of landed property. Medium properties (5,000-500 donums) accounted for 10 per cent of the area. Small properties (less than 500 donums) accounted for 86.3 per cent.

(see p. 162) and not fully cultivated, if at all. Another complicating factor in the land problem is the survival of communal ownership (musha'a), according to which the village as a whole maintains its lands in common and periodically apportions them anew among its members. This system is still found in parts of Iran, Jordan, Arab Palestine and Syria, and it is said to destroy incentive to ameliorate the only temporarily-held plots.

The confusion of land titles; the prevalence of narrow, inefficient "strip" holdings; and the excessive fragmentation of land into plots consisting of as little as a fraction of an acre in consequence of the increase of farm population and of inheritance laws which encourage the subdivision of land, are among the additional obstacles standing in the way of agricultural development, especially in Egypt, Jordan, Lebanon, Palestine and Syria.

The poverty of the villages of the Middle East is also due to a complex of other factors—widespread disease, which cuts down productivity at critical periods; underemployment, which means that many healthy villagers find nothing to do a good part of the year; rural indebtedness, which means that the peasant cannot enjoy the surplus of good crop years because of the financial pall cast by bad crop years; illiteracy, ignorance of improved farming methods, and a complex of mental attitudes which make improvements difficult to introduce from without; lack of communication among the peasants and lack of organizational means for taking common action to improve conditions; etc.

# Underemployment

Agricultural duties call for a concentration of effort at certain times of the year, but at other times there is a vast amount of potentially productive manpower which is idle in Middle Eastern villages. Studies carried out in certain villages on the Delta in Egypt, for example, showed that the average peasant worked no more than 180 days a year. Similar underemployment has been reported for other countries in the region— Lebanon, Turkey, Iran, Iraq and Syria. Pressure of population upon the limited land available aggravates the underemployment in Egypt and Lebanon, but Turkey, Iran, Iraq and Syria are not countries with a land shortage. În fact, Syria requires foreign labourers during harvesting.

Putting this idle manpower to productive work is obviously one of the basic requirements for raising standards of living in the Middle East. Among the solutions undertaken or proposed are: diversification and rotation of crops, the development of handicrafts (Egypt has used rural social centres for this purpose), the organization of effective services for distributing manpower among different occupations at different times of year (as done already in Israel), the use of spare village manpower for village improvement and development projects under a nominal incentive payment from the government ("community development employment", as undertaken in Greece), and the expansion of industries.

### Rural indebtedness and agricultural credit

Closely related to the problem of the maldistribution of land is that of rural indebtedness. The uncertainty

of the rainfall and the low income of the farmer, whether peasant, proprietor or share-cropper, combine to drive him into debt, while the lack of well-organized agricultural banks—and his lack of collateral that may be required by available banks-forces him to have recourse to money-lenders whose rates are extremely high, especially in years of crop failures when the demand for loans rises sharply.

In recent years, a noticeable improvement has taken place in this respect. In the first place, there has been a marked increase in agricultural credit facilities, mainly through governmental efforts, which has resulted in an appreciable reduction in interest rates. Thus, the institution in 1930 of the State-sponsored Agricultural Credit Bank of Egypt has resulted in a sharp decrease in the business of moneylenders. Secondly, the growth in the co-operative movement in some countries has provided an alternative source of credit.

In Cyprus, the services of the co-operative societies cover virtually the whole rural population.

In Egypt, the number of rural credit corporations was increased from 738 in 1939 to 1,654 in 1948 and the membership from 70,021 to 527,073.11 They furnish their members such services as buying supplies, marketing produce, carrying out certain agricultural work and securing loans. Their activities also are designed to promote the social welfare of their members through fighting illiteracy, spreading co-operative education, creating social clubs, fostering preventive health education and medical services, introducing rural and home industries and organizing local charity.

In Turkey, the number of rural credit co-operatives rose from 601 in 1940 to 879 in 1948 and their membership from 138,412 to 411,204; about one-quarter of the total number of villages are linked up with the cooperative credit system.

Israel is unique in that a high proportion of the rural population live in settlements organized entirely on cooperative lines; about 45 per cent of the population are covered by these and other types of co-operatives.12

In Iraq, Iran, Lebanon and Syria the co-operative movement has as yet spread among rural areas only to a limited extent, in spite of the encouragement of governments.

In view of the fact that the peasant who markets his products is frequently exploited by the merchant, the FAO considers that co-operative marketing societies "could do much . . . to secure a fair share of the price to the farmer".13

# Communications and literacy

The majority of Middle Eastern villages have no motorable road connexion with even the nearest urban centres. Newspapers, radios and telephones are rarities (though radios are increasing). The present circulation of newspapers and the number of reported radio receiving sets in Middle Eastern countries are indicated

<sup>13</sup> FAO document 51/11/3177.

<sup>11</sup> ILO, Co-operative Organisation, Report II, ILO Regional Conference for the Near and Middle East, published Geneva, 1950.

12 Data supplied by the International Labour Office.

below.<sup>14</sup> It can be assumed that except in Cyprus, Israel and Lebanon, most newspapers and radios are found in the towns.

| Daily newspapers:<br>number of copies<br>circulated per<br>1,000 population |     | Radio receiving<br>sets: number per<br>1,000 population |  |
|---|-----|---|--|
| Afghanistan   | 1   | 0.7   |  |
| Anglo-Egyptian Sudan  |     | 0.4   |  |
| Cyprus  | 86  | 24  |  |
| Egypt   | 17  | 12  |  |
| [ran  | 5   | 3   |  |
| [raq  | 10  | 6   |  |
| Israel  | 235 | 123   |  |
| Jordan  | 28  | 5   |  |
| Lebanon   | 81  | 36  |  |
| Saudi Arabia  |     | 2   |  |
| Syria   | 19  | 15  |  |
| Turkey  | 16  | 16  |  |
|   |     |   |  |

Isolation is most extreme in the mountainous hinterland of Afghanistan and Iran; in the border region of Iran, Iraq and Turkey; in southern Arabia; and in the southern part of the Sudan. However, many villages within only a few kilometres of major cities also still lack the benefits of modern education, medical care and technology which are available, to some extent, in the cities themselves.

Like nomadic culture, village culture has been predominantly non-literate. There is, to be sure, a rich traditional body of folk stories, songs and the like; but most villagers speak local dialects differing more or less widely from written Arabic, Persian or Turkish, and learning to read and write has meant in effect learning almost a new language. Only very recently have any efforts been made to take these difficulties into account in mass-communication media.<sup>15</sup>

Village schools, where they have existed at all, have traditionally been religious schools, in which, as previously stated, the sheykh of the village mosque taught some of the village boys to read and memorize the Koran, along with the rudiments of writing and arithmetic. Girls were rarely sent to school, and the small percentage of village boys who attended left after one or two years of study. Up to a century ago, these Koranic schools (kuttab or maktab) were almost the only schools in the Middle East, but their number is diminishing with the increase of facilities for secular education. In many villages, however, they remain the only schools available, and in some places there is still an opposition to sending children to secular schools, even though in the secular schools in most Middle Eastern countries teaching of the Koran and other religious subjects occupies a prominent place in the curriculum. Transitional phases are apparent. In Afghanistan, for example, where the development of a rural school system has only just begun, the most recent government plan states that such schools shall be housed in community mosques and taught by the community religious

leaders until the Government is able to construct separate school buildings and train teachers.<sup>16</sup>

Rural school systems are gradually being expanded, but the goal of a school in each of the thousands of villages is still distant in most countries. In 1945, some 12,500 villages in Turkey (or 37 per cent of the total number of villages) had schools, as against 21,500 (63 per cent) villages without schools. By 1948-49 more than 12,000 teachers had graduated from twenty-four village institutes established for the purpose of training teachers for the rural areas. It is hoped that by 1956 approximately 37,000 village teachers will be ready to take jobs in the villages, thus providing an average of more than one additional teacher to each village.

The need of village families to utilize the labour even of young children on the land, the financial burden of building thousands of schools and paying thousands of teachers, and the difficulty of finding and training teachers willing to undergo the isolation and discomforts of village life, have prevented most Middle Eastern countries from making rapid progress in the field of education.

Furthermore, in spite of the fact that the towns are already better off with regard to schooling than the rural areas, some governments continue to pay much greater attention to the increase of urban educational facilities rather than those of the countryside.

A complex of mental attitudes associated with the isolation and illiteracy of the Middle Eastern villagers, as well as with their historical experiences, sometimes renders outside efforts at improvement of living standards difficult. A suspicious attitude towards everything that comes from outside, and especially from the authority of the government, is still widely reported. Until recently, changes of government usually meant little to the villagers, their only contact with government having been payment of taxes. Accustomed not to an "expanding economy" (where new wealth may add to the total wealth) but to a static economy (where increases in wealth of one person or group are apt to be at the expense of others), the villager has been rather more concerned with holding on to what little he has possessed than with pursuing ideals of progress and material improvement. Furthermore, living not too far above the bare survival level, without capital reserves, he has been loath to take risks that might prove disastrous for himself and his family. These adjustments to a situation of poverty have, in turn, served to impede action against poverty.

### Social change in the village

The Middle Eastern village today presents a contradictory picture of adherence to tradition and anxious desire for change. The villager clings to the family, community and religious institutions which have in the past contributed to his security, and is mistrustful of outside forces which threaten to weaken these institutions. At the same time, he cannot ignore these forces. In many cases, the increasing pressure of population on village landholdings prevents the villagers from maintaining their accustomed subsistence level and weakens the ties of the extended family. Improvement of com-

<sup>14</sup> Source: UNESCO, World Communications—Press, Radio, Film, Television, Paris, new and revised edition, July 1951.

<sup>15</sup> For example, the Egyptian State Broadcasting Corporation started in 1940 and has expanded in recent years a programme of broadcasts offering subjects of special interest to the rural population and employing Egyptian colloquial Arabic rather than the literary Arabic customary for its radio programmes.

<sup>&</sup>lt;sup>16</sup> International Yearbook of Education, 1950, p. 41.

munications permits a search for alternate means of livelihood. Some villagers drift away to the city in search of wage-labour, and the idea that change may be possible and desirable trickles back to the villages. The villagers themselves are beginning to demand land reform, schools, health services and co-operatives, and the governments are beginning to meet these demands. The demands, of course, are frequently vague; the villagers know that something must be done, but are not sure what. And government measures are, in many cases, adopted without full planning, and frequently changed with changes of government.

Since the village population constitutes two-thirds of the total population of the Middle East, the problems of the village are also the problems of the region as a

It is obvious that, because of the interdependence of the various factors affecting rural welfare, a comprehensive programme of change is desirable—involving improvements in health and sanitation, housing, education, communication, techniques of agricultural production, credit, uses of manpower, etc. Thus, an interesting experiment in comprehensive rural development projects has been undertaken in Egypt where a series of "rural social centres" has been set up, based upon the principles of: (1) co-ordination of comprehensive services involving economic, social and cultural elements; (2) co-operation of the community in the construction of the centres; and (3) simplicity and low cost in capital and recurrent expenditures.<sup>17</sup> The endeavour is to promote change by concentrating on local problems, taking local attitudes into account and encouring local leadership. The "People's Houses" in Turkey have had similar goals of comprehensive social services.

At the same time, it is also apparent that improvements in the welfare of the village communities will also depend greatly upon the over-all development of the country at large, including, particularly, industrial development.

# THE MIDDLE EASTERN TOWN Town and country 18

Towns have been cultural fixtures in the Middle East ever since the beginnings of recorded history, and urban centres, constructed on the same site and each having a past of 4,000 years and more, are not unusual. The history of the town is not characterized by the stability which is a basic feature of the Middle Eastern village, for the town has not infrequently experienced catastrophic ups and downs, changed rulers, and undergone great cultural vicissitudes. Nevertheless, the role of the town vis-à-vis the nation as a whole has remained fairly constant, having always been, and continuing to this day, the undisputed cultural centre of the surrounding countryside. Its direct influence upon the countryside varies with the ease of travel and communication.

Although the poorest elements of the rural population are obliged to be self-sufficient, producing prim-

<sup>17</sup> United Nations document E/CN.5/244, annex I.

itive types of utensils and apparel in accordance with age-old methods of home-craft, those country dwellers who are but slightly better off become buyers of wares and merchandise produced in the towns; and the higher they ascend in the economic scale the more they become dependent on the town for the satisfaction of even their primary needs, such as food, clothing, utensils and housing materials.

In addition to being the manufacturing, trading and financial centre, the typical Middle Eastern town is also the seat of the administrative, political and judicial institutions, and concentrates within its limits all those elements devoted wholly or in part to educational, literary, journalistic, artistic and other intellectual pursuits. During the last few decades, such institutions as modern universities, hospitals, scientific and other societies, amusement centres and the like have been added to the cultural features which are to be found only in the towns.

The outcome of this is a deep cleavage between town and country. The town is widely regarded by both the townsfolk and the rural population as the focus of everything desirable, while the village is the symbol of backwardness. The great attraction the town has for the country people explains at least partly the constant flow of migrants from the village to the

Such migration was apparent in most countries of the region before the Second World War, and was accelerated by war conditions, when supplies became much easier to obtain in the towns than in the villages, and when industrial development and the requirements of the allied forces offered increased opportunities for employment. In Cyprus, while the total population increased by 29 per cent between 1931 and 1946, that of the six district towns increased by 59 per cent. In Egypt, between 1937 and 1947, the total population increased by 20 per cent, while the population of the five governorates (including Cairo, Alexandria, Port Said, Suez, Ismailia and Damietta) increased by 53 per cent. In Turkey, between 1935 and 1945, the population of towns with over 25,000 inhabitants rose by 37 per cent against a rise of 17 per cent in the total population of the country (Turkish towns with a population of over 25,000 still accounted, however, for only 13 per cent of the total population, a proportion lower than that prevailing in most of the countries of the Middle East).

No comparable figures can be given for the other countries, but it is known that in Iran the population of the larger towns rose very rapidly during the years of the war, especially that of Tehran, which is reported to have increased from 533,000 in 1940 to 990,000 in 1950. Similarly in Jordan the population of Amman, recently swollen by the influx of Palestinian refugees, now stands at 100,000 against 25,000 before the outbreak of the Second World War. In Lebanon, too, there is definite evidence of a movement from the countryside into the two main towns, Beirut and Tripoli, which between them account for one-third of the population of the country. Despite the trend toward urbanization, however, large cities are still comparatively rare in the Middle East.

<sup>&</sup>lt;sup>18</sup> Sociologically, town and country must not be conceived of as two opposite alternatives, but as designations which conveniently conceptualize two extreme types of a continuous scale.

Social and occupational structure of the towns

From the foregoing it is evident that the typical Middle Eastern town is a meeting place for rural elements who converge on it in a constant stream. The growth of Middle Eastern towns is not due primarily to their own natural increase which, as a matter of fact, is smaller than that of the countryside, but to this village-to-town migratory trend.

In addition to these rural migrants, the Middle Eastern towns contain, as a rule, the major part of the foreign and indigenous minorities (ethnic or religious) residing in the country. The few large urban centres usually are divided into a modern "new city", inhabited by the well-to-do, and an "old city", frequently still surrounded by walls, with narrow streets, antiquated and overcrowded houses and extremely poor sanitary conditions. No such distinct division between old and new city exists in the smaller towns; they are usually divided into quarters not according to economic status but according to kinship. Each "quarter" is inhabited by a clan which is the urban equivalent of the rural (and nomadic) hamula, and which consists of a number of extended families whose common traditions imply the existence of a certain interrelationship. Until quite recently many of these "quarters" constituted veritable independent municipalities, with separate chiefs (mukhtars), religious heads and even night-watchmen.

The towns of the Middle East exhibit a wide variation in occupational structure, according to their size. In the small towns (up to about 10,000 inhabitants), which are in many cases still regarded as villages, much of the population is agricultural, and only a minority is engaged in other occupations such as craftsmanship, trade and commerce. The shops and stores of these non-agricultural inhabitants are situated in the centre of the town near the mosque, and together with the school, the cafe and one or two buildings housing such administrative offices as may exist, they form the nucleus of the town. While in the small towns only single craftsmen and tradesmen are found, the larger towns contain a group of specialists in each craft and trade, usually organized in guilds and having shops located in the same street within the commercial section which here already has grown to the size of a bazaar. Such a larger town needs the services of a considerable number of unskilled workers as well as of skilled workers who are employed by mastercraftsmen in the so-called "old industries" which, until a few decades ago, were the only domestic source of supply of marketed consumer goods to town and country alike.

The larger towns are often administrative centres of their respective districts, and as such are inhabited by various officials—judges, lawyers, policemen, religious functionaries, and other professional and white-collar workers whose presence, together with that of the guilds, is the only reliable criterion by which village and town can be distinguished from each other.

The very few large cities in the Middle East, and the national capitals (which are, as a rule, the largest cities,) contain a high proportion of industrial and commercial establishments, a sizable official class, and the well-to-do people (primarily the large landowners) who prefer to live in the capital, where they are nearest to court or government buildings and where they can participate, as they most often do, in the administrative and legislative leadership of the country.

This attraction of the large (and often the capital) city for the wealthy owner class has had far-reaching influence on the social and economic development of the Middle Eastern countries. What the "owner" class originally owned was only landed property, but since this class tended to concentrate in the large cities and to spend there the wealth which kept accruing to them as a result of their rural income, they soon acquired much importance and influence in the cities as well, and were acknowledged unquestioningly as the leading element in urban life. When two important modern developments took place in the Middle East, namely, industrialization and government reorganization, the position of the owner class was further strengthened. Its members invested capital in modern industrial enterprises, and in this manner the landowner class became also an industrial owner class. Moreover, its members presently became also administrative officials in the government and members of the newly established legislative bodies.

Members of this upper or owner class, which is numerically small but the influence of which extends into every walk of life, currently manifest a mixture of progressivism and conservatism. With regard to their own way of life, they are often ready to adopt many features of Western civilization to the point of discarding much of the socio-religious traditions of their own culture. With regard to urban and rural workers, they are suspicious of change which they fear might threaten their own economic interests. But they furnish an example in adopting many Western modes of thought and behaviour, thereby arousing and intensifying the wish for the same type of change among the members of the other classes.

The middle class is numerically very small, particularly in terms of professional elements. A small but influential group is emerging that takes a deep interest in social problems and is devoted to social reforms and the advancement of civic interests; included here are journalists, writers, teachers, civil servants, social workers and the like.

Increasing industrialization in several Middle Eastern countries has resulted in both the numerical increase of the urban working class and the increase of the percentage of skilled workers in their midst. The countries most advanced in this process are also most advanced in legislation for the protection of the workers and their rights.

General levels of education and literacy have also advanced, although much progress still lies ahead. While the villagers and the nomads have a highly developed non-literate culture, and are only just beginning to appreciate the need for literacy as one of the prerequisites for overcoming their tradition-bound poverty, in the cities illiteracy is more directly a handicap, and usually coincides with low social and economic standing. A survey conducted in Alexandria, Egypt, in 1944 showed that a literate person earned twice as

much as an illiterate in the same kind of job.19 Secondary and higher education is still largely the privilege of the urban middle and upper classes. The smallness of these classes is reflected in the small number of children continuing their schooling after finishing the elementary classes.

# Handicrafts and old industries

Of great importance is the process which results in a gradual elimination of the old industries in favour of the modern, more recently introduced, factory sys-

The traditional (or "old") industries are one of the typical features of the industrial structure in Middle Eastern countries. Apart from those producing artistic wares, however, most of them, both in the towns and in the villages, largely concentrate on the satisfaction of more or less local needs. Generally speaking, they differ from modern industrial enterprises in their primitive equipment, small capital and relatively low output. They are also dependent to a considerable extent on middlemen who supply them with raw materials, grant loans (sometimes at very high rates) and market their products.

Some classes of artisans in the towns have either become more or less adjusted to industrial progress or else have been forced out of their field; on the other hand, village craftsmen, who also frequently engage in agricultural work, have been rather more successful in standing up to the competition of modern industry, though mass-produced articles have made an inroad here too. The industrial activity of the Middle Eastern countries, with the exception perhaps of one or two, displays a combination of modern methods of manufacture and traditional craft methods.

In Iraq, between 4½ and 6 per cent of the working population is believed to consist of industrial workers and artisans, and it is estimated that modern industries absorb 1½ to 2 per cent of the total population, while the artisan class represents 3 to 4 per cent. The number of workers employed in traditional industries is perhaps less in Iraq than in other countries of the Middle East, but it can be stated in a general way that more people are employed in these industries than in modern industry.

A high proportion of the output of the traditional industries derives from the labour of women and children. In the villages, part-time handicrafts are usually as much undertakings of the whole family as is the tilling of the fields; the family augments its inadequate income from the land by handicraft work during the agricultural slack seasons. In the cities, the traditional industries are often carried on in small workshops which may employ the family of the owner, a few male or female employees engaged on a piecework basis, or children recruited as apprentices. An inquiry in Syria and Lebanon in 1937 disclosed 90,065 men, 58,413 women, and 22,300 children engaged in the "old industries".20

# The modern industries

In the modern industries—factories producing textiles and other consumer goods, oil wells and refineries, mines, etc.—cash wages are usually much higher than in agriculture or the traditional industries. However, the real income of the family which exchanges agricultural-with-handicraft labour for urban modern industry does not usually increase in proportion. The worker is generally no longer able to count on his wife and children to supplement his own income. From the rather imperfect data available (usually referring to prewar years), it appears that the number of women employed in modern industry in most Middle Eastern countries is between a fifth and a tenth the number of men, and their average wages less than half those of men. In agriculture and handicrafts on a piecework basis, a woman might contribute almost as much to the family income as a man, depending on the amount of time she could spare from housework.

The practice of child labour has inevitably been transferred to the new industries, but without the safeguards inherent in the traditional system when the child works under direct parental supervision, and in fact is gradually educated in the occupation of his parents. Parents moving to cities naturally expect their children to work as they did in the country, but here it often becomes a question of outside employment rather than employment by parents. In some cases, children are recruited by agents taking advantage of the extreme poverty of their parents. The employers seeking child labour have done so primarily because of its extreme cheapness, though in some industries, particularly in carpet-making in Iran, it is held that the small fingers of children are better suited to the delicate task of knotting than are those of adults.

In general, however, the proportion of children working in the "new industries" has been small compared to that in agriculture, and that found in the "old industries". In Syria and Lebanon in 1937, for example, out of 170,778 workers in the "old industries", 13 per cent were children; out of 33,149 workers in the 'new industries", 8 per cent were children. In Egypt in 1947, out of 3,118,000 children of both sexes aged 9-15, 827,000 were estimated to be working in agriculture, 68,000 in industry, and 10,000 in commerce. In Turkey in 1935, out of 6,662,593 children under 15 years of age, 902,291 worked in agriculture, 32,452 in industry, and 10,250 in commerce and domestic service.<sup>21</sup>

The gradual extension and enforcement of laws regulating recruitment or wages of child workers and the fixing of minimum ages of employment (usually 12 or 13), together with the application of compulsory education laws in urban areas, are reducing the extent of child labour in those new industries where enforcement is relatively easy and regulation most needed. Labour

<sup>19</sup> Cf. United Nations Social Welfare Seminar for the Arab States of the Middle East, Beirut, 1949, document no. ME/3 S/6 C1.

<sup>&</sup>lt;sup>20</sup> Cf. International Labour Review, "Conditions of Work in Syria and Lebanon", April 1939, p. 513, as quoted by ILO Regional Meeting for the Near and Middle East, Istanbul, November 1947, Report on Protection of Industrial and Commercial Workers, p. 21.

21 Source: ILO, Report of Regional Meeting for the Near and Middle East, Istanbul, 1947, p. 36.

inspection services, however, are poorly developed or non-existent, except in Egypt, Turkey and Israel, and enforcement is extremely difficult in the large number of small workshops and home industries employing children; in any case, the laws frequently contain exceptions permitting parents or others to start children at work at ages as low as 9 or even 8. The laws usually do not affect the children employed in agriculture.

The same situation exists in more general legislation on working conditions and hours of labour. The countries with appreciable industrial development (Egypt, Iran, Iraq, Israel, Lebanon, Syria and Turkey) have adopted considerable bodies of legislation applying to specific categories of industry. Daily hours are usually limited to eight or nine, weekly hours to forty-eight or fifty-four, and weekly rest periods, holidays, industrial safety measures, etc., are provided for. These laws, however, are rarely applied to the small workshops, where the working day may be as much as twelve hours, and the much more numerous agricultural workers are almost entirely without legal protection.

# GENERAL PROBLEMS OF MANPOWER AND EMPLOYMENT<sup>22</sup>

In most countries in the region, industrial labour, which is of peasant origin, still has strong ties with rural life which cause it to move constantly to and fro between industrial and agricultural work. Moreover, workers without any industrial tradition have difficulty in adjusting themselves to the strict discipline of the factories. Because of these conditions, labour has a marked tendency towards instability which may either take the form of constant changes of employment or that of absenteeism.

This instability is accentuated by other causes. Owing to the absence of collective agreements, conditions of employment have only been standardized to a very limited extent. There are great differences in the level of wages paid in different branches of industry and also between those paid in different undertakings within the same branch. The very low wages paid by certain firms cause workers to try to improve their position by changing their employment. Shortage of accommodation is acute throughout the region. Workers who are forced to leave their families in the country or to camp with them in the vicinity of the factories under extremely uncomfortable conditions, lose patience and try their luck elsewhere. The standard of training of the workers as a whole is low and leads to frequent dismissals.

In certain cases, inquiries have made it possible to estimate the degree of instability resulting from these various causes. For instance, an inquiry carried out by the employment service in Turkey in 1946, into 1,368 undertakings, showed that 24 per cent of the workers in these undertakings had less than six months' service, and 43 per cent had service of one year or less. A textile factory in the same country had a labour turnover of more than two-thirds during 1948. Several large Egyptian firms which regularly record absenteeism, calculated that two or three years ago it amounted, on an average, to 9 or 10 per cent.

The tendency to instability has, however, been reduced to some extent in a number of countries by

improvement of working conditions and by social legislation establishing weekly rest days, holidays with pay, or compensation for dismissal, contingent upon a certain period of steady work.

An even balance between town and country appears to be the main problem of the employment market in the region and it is most desirable that measures should be taken to ensure this balance, by giving rural and town workers comparable living conditions.

The institution of a rural welfare service in Egypt and that of a few model villages in Syria mark the beginning of an effort to secure equilibrium between social conditions in town and country.

Means of estimating the activity of the employment market in the Middle East are, in general, lacking. An increase in unemployment during the last several years is noticeable in the few countries where the unemployment services are sufficiently active for their statistics to provide even an approximate indication of activity in the employment market. Elsewhere, special circumstances, such as public runs on available employment offices, have thrown some light on the situation. There are many other signs of unemployment in the region: for instance, workers in large numbers offer their services to the undertakings, and applicants for jobs throng round the gates of factories on the days when hands are taken on.

Unemployment exists among the less skilled categories, especially among the peasants who are attracted from the country to the towns without having had the preparation which is essential if they are to adapt themselves easily. Unskilled labour is everywhere available to industry in large numbers. It appears, howeverfor instance from the unemployment registers of placement offices in Egypt—that unemployment is also to be found among the educated classes; too many of them have been trained in branches of study which exercise a strong attraction on youth without responding directly to existing economic and social requirements. The universities in the region undoubtedly train too high a proportion of lawyers and too few doctors and engineers. There are, however, also cases (in Egypt, Turkey and Iran, for example) where those who have passed out of vocational training schools have not been able to find employment, probably because the technical instruction given has not been adapted to the existing needs and opportunities.

The causes of unemployment vary from one country to another, and from one district to another in the same country.

Unemployment in towns is partly due to a noticeable decrease in the activity of certain branches of industrial production. When international trade started again after the war, and before measures to counteract its influence had been taken, the competition of imported products adversely affected various industries. The rise in the cost of living, which was greater in this region than in the great exporting countries, increased still further the difficulty which local industries found in meeting foreign competition, even where the industry in question had already been in existence before the war. An even more important cause of unemployment is the surplus of town workers, which arose as a result of the

<sup>&</sup>lt;sup>22</sup> This section is based directly upon a portion of chapter I of *Manpower Problems*, ILO, Geneva, 1951, Report I, ILO, Regional Conference for the Near and Middle East.

war and has not yet been reabsorbed. It is estimated that in Egypt the resettlement of workers who were employed by the Allied armies is practically complete, but this does not seem to be the case in Iran, Iraq and Lebanon. In Lebanon, the number of workers who were employed by the armed forces is estimated at 35,000—a very high number when compared with the size of the population. But those who worked for the armed forces—largely peasants who were tempted by the prospect of receiving regular wages instead of the doubtful annual profit from farming—are only a fraction of the large number of peasants who have been attracted to the towns throughout the Middle East by the hope of better living conditions than those prevailing in the country.

The factors which make for depression in the urban employment market include the presence in the region of some 750,000 Palestinian refugees, probably onequarter or one-fifth of whom have family responsibilities and are fit for work. Their presence influences the internal situation more or less according as they depend for their subsistence on relief in the camps—as in Egypt—or are free to mingle with the population and look for work. Although the partial census, covering 251,205 persons, which was carried out by the League of Red Cross Societies on 25 March 1950 in the three countries for whose relief the League had made itself responsible (Lebanon, Syria and Jordan), showed 13,114 agricultural workers out of the 44,752 persons who were fit for work, or nearly 30 per cent, it is mainly in the towns that the refugees concentrate, swelling the numbers of those looking for casual work.

Land scarcity, irrational distribution of land, inadequacy of the peasant's means of cultivation, regional calamities—particularly the drought which overwhelmed several countries in the region in 1947—must be included among the causes of unemployment in country districts, as must the poor state of land which, though arable, is badly irrigated or liable to flooding because work essential to flood control has not been carried out.

It is difficult to distinguish unemployment from underemployment, especially in countries where the employment market is not organized to any great extent. However, a large proportion of the population in the towns as well as in the country districts seems to do very little work.

In the towns, apart from the considerable number of manual workers-porters, commissionaires and unskilled workers on the lookout for a job of any kind -there are also many tradesmen and shop assistants who sit in their booths and wait for customers, and hawkers who look for their customers in the street, waiting for long periods at the entrances to hotels, stations and other public places. The large industrial undertakings themselves often carry a considerable surplus of labour. In Iran, in particular, the threat of unemployment in the spring of 1950 was only avoided by the practically general underemployment of the personnel of industrial undertakings-both private undertakings and those run by the State. These undertakings had to keep unnecessary staff on their pay rolls in order to prevent the disorders which are liable to arise as a result of real unemployment. Underemployment in the towns is, therefore, a concealed form of unemployment which lowers per capita productivity and is thus a heavy burden on the whole economic system.

A number of social factors must be noted which lead to serious difficulties in the way of improved employment conditions in the Middle East: the extreme poverty of the population which makes workers tend to change their location and their employment in an effort to improve their miserable lot; work by children at an early age which is fatal both to their education and to any serious vocational training and is a cause of disorganization in the employment market; the cultural prejudices of the well-to-do classes against anything approaching manual work, no less fatal than lack of elementary education among the poor to the development of vocational training in skilled manual trades, adherence to traditional loyalties and authorities, and to trades which have partly ceased to be necessary but have a tendency to survive and give rise to underemployment. In several countries in the region, also, the absence of trade-union organization, or its limitation to small groups within individual undertakings, hinders co-operation by workers' representatives with the authorities in attempts to organize employment and vocational training.

# GENERAL PROBLEMS OF HEALTH AND SANITATION

The main achievement of modern public health methods in the Middle East has been the control of pestilential diseases. Today, when these diseases reappear in epidemic form, they can be localized and stamped out by national health services with assistance, if necessary, from WHO—as Egypt did with an epidemic of cholera in 1947.

The fight against debilitating endemic diseases has begun; thus far the most important successes have been against malaria, which has been almost entirely eliminated in Cyprus, confined to small areas in Israel and Lebanon, and brought under control in some districts of other countries. The village populations in most areas, however, are still burdened by a combination of such chronic illnesses as malaria, trachoma, bilharziasis, hookworm and venereal diseases, which shorten their lives and reduce their capacity for work. Most of the governments are planning to launch campaigns against these diseases, through diffusion of insecticides, drainage of swamps and canals, provision of adequate wastedisposal systems and hygienic water supplies, and establishment of village clinics and dispensaries. Thus far, in the majority of the countries concerned, such measures have reached but a small proportion of the population. In general, an appreciable improvement in the lot of the Middle Eastern peasant is inconceivable without the institution of a broad sanitation programme.

Aside from the communities in which special health centres have been established, the nomadic and village population has practically no access to medical care, since there are very few physicians or hospitals outside the larger cities. In Iraq, for example, there was a population of 4,611,000, in 1945, and only 569 physicians; of these 308 were located in the capital, Baghdad, which has less than 10 per cent of the population of the country.

Still another factor, sometimes constituting a serious obstacle to the full utilization of available modern

medical facilities in the region, is the frequently encountered reluctance of the population, accustomed for many generations to the services of its own traditional practitioners, to turn to modern doctors. Even in urban areas, many of the people will consult first of all the herb doctor, the barber-phlebotomist, the cupper, the wise woman, or the religio-medical practitioner; and only when their largely unscientific efforts have failed (and frequently when the case has become hopeless) will the patient decide to consult a qualified medical doctor or enter a hospital. In the rural areas the situation is often worse, and to retain the services of a modern doctor may at times even be regarded as a breach of the local mores. There is still widespread opposition, on the part of women and their menfolk alike, to the examination and treatment of female patients by male physicians. It is thus evident that technical efforts directed toward expanding sanitation and medical services, in order to be fully effective, must go hand in hand with an educational effort directed towards the total population.

In the Middle East, there is a basic and urgent need not only to train many more doctors, nurses, and public health officers, but also to develop a medical and health corps dedicated to rural services. The financial difficulties involved in developing such trained personnel, and in supporting their work among poverty-stricken villagers who cannot afford fees, constitute tremendous problems in these countries, as do the difficulties that arise from the fact that city-trained medical and health personnel are often reluctant to live and work in isolated "backward" villages where they can enjoy few of the amenities and satisfactions of life to which they are accustomed.

## Nutrition

The nomads live mainly on cereals, dates, milk and milk products, while the settled farmers, for the most part, consume cereals, fruit and, to a much lesser degree, milk and milk products; meat figures but slightly in the diet of either group. The poor people in the towns are often underfed, their diet consisting mainly of cereals, pulses, fruit, some fish, vegetables and likewise very little meat.<sup>23</sup>

A few surveys of urban and rural groups in Egypt suggest that the diet of the villagers may be superior to that of urban groups, but this situation is not necessarily true in other areas, as shown by several surveys in Iraq.<sup>24</sup> (It must be recalled that the transfer of food to townspeople and towns does not follow merely from choice but from necessity under tenancy and share-cropping arrangements.)

In general, for lack of information based on systematic nutritional surveys, little more can be said about food consumption in the Middle East than that in wide areas there appears to be a deficiency of calories, in a few others (e.g., Turkey) an adequacy, but that nutritional imbalance is particularly widespread and serious, with a lack of "protective foods" that are rich in essential vitamins and minerals. Deficiency diseases, such as rickets and pellagra, are widely reported.

It is not clear whether there has been any general improvement in diets in the Middle East in recent years. Some groups are probably worse off due to increasing pressure on the land and rising costs of living. On the other hand, a number of programmes have been initiated with a view to making more effective use of the available food supplies. In some areas limited food-control measures have been introduced, as well as allowances of food at subsidized prices. These relate principally to cereals. In Egypt there have been supplementary feeding programmes for a considerable number of years. The Compulsory Education Act, recently introduced, makes provision for the so-called Oslo-type hot school meals as a standard benefit. "Social kitchens" have also been organized to provide industrial workers with meals. In Egypt, too, there is a Standing Committee on Nutrition, and recently a Nutrition Society has been formed. Pellagra, once a common deficiency disease in Egypt, is becoming progressively rarer.25

Two general considerations must be kept in mind in discussing the inadequacies of Middle Eastern diet. First, the deficiencies are the result of regional dietary traditions as well as of the unavailability of certain foods or the lack of money to buy food. This is particularly true of the nomadic and rural populations. Secondly, the nutritional values that these populations in their particular environments may obtain from their traditional diets are not clearly understood.

### SOCIAL SECURITY AND WELFARE

The Middle Eastern countries are now in the process of developing their social legislation and services. For the most part, these efforts have reached only the urban population, but as noted above, several countries, particularly Egypt and Turkey, have pioneered with community centres adapted to the needs of the villagers.

For the great majority of the population, however, the only social assistance available is provided through traditional religious alms-giving and eleemosynary institutions.

Alms-giving (zakāt) is one of the Five Pillars of Faith in Islam. It is a religious obligation to be discharged either in cash or in kind (usually foodstuffs) according to certain well-defined rules. (It is expected to amount to at least 2.5 per cent of the annual savings). Additional donations, especially on certain religious feast days, are regarded as one of the best means of augmenting the prestige of the donor in society and of propitiating God for the forgiveness of sins and transgressions.

The first recipients of this charity are, as a rule, poor relatives, though strangers should also be considered. The extent to which alms-giving actually helps poor households can be gauged from the fact that a sample group of poor Egyptian rural families (with an annual income up to £E25) was found to derive 10 per cent of its income from relatives, and more than 6 per cent from private persons or charitable societies. The urban poor in Cairo and Alexandria (family income under £E60 a year) derived 13 per cent of the income from relatives, and 3 per cent from private persons or charitables.

 <sup>&</sup>lt;sup>23</sup> Cf. FAO, The State of Food and Agriculture, 1948, p. 60.
 <sup>24</sup> Cf. FAO, document 51/11/3177, p. 93.

<sup>&</sup>lt;sup>25</sup> Cf. FAO, The State of Food and Agriculture, 1949, p. 33.

itable institutions. Since these donations are prescribed by religious law, they are not regarded as voluntary charity, but rather as an obligatory tax.

A major role in traditional Middle Eastern charity is played by the institution of waqf.

Waqf is the Arabic name, used all over the Islamic Middle East, for foundations established by the wealthy under testamentary provisions. There are a great many types of waqf, the definition and characterization of which is an important chapter in traditional Moslem jurisprudence. It will be sufficient for the purposes of this chapter, however, to mention but two prevalent types—namely, a family waqf (waqf ahli), the income of which is devoted exclusively to the welfare of the testator's own family; and a charitable waqf (waqf khayri), the income of which may be used for specific charitable projects or to promote the general welfare.

After the death of the testator a group of trustees, usually appointed by him in his will, supervises the administration of the property and sees to it that the income provided is used for such purposes as are specified in the testament. In some Middle Eastern countries public bodies have been formed for the purpose of administering the waqfs where the testament has designated the public as trustee. In Egypt, a special Ministry of Waqf has been established to discharge this function. Among the activities of this Ministry, the following may be mentioned as characteristic of its general work. In 1949, 5,358 families and individuals, who, as a result of sudden disaster, lost their incomes, received pensions amounting to £E120,000. An additional £E33,000 was spent for periodic relief (for illness, marriage, childbirth). On the occasion of national feasts, special help is given and clothing is distributed. The Ministry also extends loans to the needy to be repaid within one year. From 1944 to 1949, the annual average loaned was £E25,000, and the number of families receiving loans annually was c. 10,000. In 1939 waqfs controlled c. 650,000 feddans (or 260,000 hectares) in Egypt, that is more than 10 per cent of the total cultivated area.

In Iraq the waqfs are administered by the Directorate-General of the Waqfs, which supports an Islamic Orphanage (established 1925) and other charitable institutions, as well as religious institutions. In Turkey, numerous vakif (i.e., waqf) foundations support hospitals, schools and charitable institutions. The Turkish vakifs are administered by the Vakif Council.<sup>26</sup>

Also active in the Middle East are private benevolent societies which in some countries perform widespread activities in social work, including relief, nutrition, education, medical and social services, vocational guidance and institutional social work.

In the Saudi Arabian cities of Mecca and Medina there are special compounds where the indigent, regardless of nationality, are fed. These compounds are mostly governmental; a few, however, are supported by private philanthropies. A Committee of Alms collects funds from various Saudi Arabian cities for the purpose of distribution amongst the needy deserving aid.

In a region in which charity has been for centuries a religious obligation, the establishment of modern institutions for social help is both facilitated and hindered: facilitated, because the traditional awareness of the need and the duty to help the poor makes it easier to allocate State funds for social help; hindered, because a certain opposition on the part of the traditional organizations and institutions has in many cases to be overcome before modern measures, adapted to changing social and economic conditions (e.g., break-up of the extended family), can be introduced.

Most of the Middle Eastern countries are actively interested in the development of social insurance legislation, but face the difficulty that incomes, particularly among the rural majority, are too low to enable individuals to contribute to social insurance or pension schemes. Several countries now have limited workmen's compensation and industrial accident insurance schemes in effect; in Turkey, employees in firms with ten or more workers now also enjoy old-age pensions and sickness and maternity insurance. Agricultural workers, however, are not included. Egypt is the first country to introduce a scheme applicable to the rural as well as to the urban population. Non-contributory pensions, subject to a means test, are to be available to persons of 65 years and over, widows with dependent children, orphans and disabled persons. This Egyptian scheme, which was prepared with the assistance of the Technical Assistance Administration of the United Nations and came into effect in February 1951, is to be financed exclusively through governmental funds.

# Conclusion

The foregoing pages have sought to present a general analysis of social conditions in the Middle East. Whereas the Middle East has been treated on a regional basis in respect of the conditions described, it should be stressed that the generalizations resulting from such treatment are affected by the variations which exist between one country and another, between one town and another, and, in the larger towns, between one class and another. With this reservation, then, it may be said that the Middle Eastern peoples have a substantially agricultural economy, with a loosely related pastoral economy on its periphery, and a modern industrial economy in process of development in its more advanced and urbanized areas. Implicit in the analysis of the social conditions of this trisected and only marginally integrated society are the two basic problems besetting it: namely, the great inequalities in the distribution of wealth and the extremely low living standards of the great majority of the peoples.

At the present time, the Middle East is in the grip of a social upheaval, the causes and ingredients of which are varied and complex. Chief among the factors involved are the long-standing problems of poverty and endemic disease, brought to focus by increasing contact with the West and consequent awareness of its higher standard of living; the disintegration of the traditional family pattern and the decline of patriarchal authority; the growth of national self-consciousness and nationalist aspirations; the increasing pressure of population upon

<sup>&</sup>lt;sup>26</sup> Assistance to Indigent Aliens, Social Commission, Seventh Session. United Nations document E/CN.5/235/Add.1, 10 January 1951, p. 34.

land in some areas; the expansion of cities and industries, attended by a gradual reduction of the isolated hinterland; and the increasing demand for the social and political equality of women.

The byword in many quarters is change, though there is little unanimity on what change is desirable, or how it is to be effected, or at what pace. In governmental and professional circles, thinking about the problem of social change has crystallized into two contrasting points of view: the one envisages the destiny of the Middle East as lying in the direction of a return to the pristine ideals, values and traditions of Islam, and seeks to effect changes and reforms within that framework; the other advocates radical and sweeping innovations along Western lines, and the scrapping in large part of indigenous traditions. Yet a third view, however, takes a middle position, and considers that the basic need is for an organic development of Middle Eastern society in which desirable innovations borrowed from outside

are integrated and merged with strong and wholesome forces of traditional culture. In many parts of Turkey, Egypt, Syria and Lebanon, economic and social change is already quite far advanced; yet in other parts of these same countries, as elsewhere throughout the Middle East, such change has been slight.

Beneath the surface of the ideological divisions, however, there is a growing restlessness among the masses of the people. At the same time, the significance of the masses and the need for improving their lot are being increasingly recognized by all classes. Leaders of government have, to a greater or lesser extent, initiated or planned reforms (e.g., social welfare programmes, political suffrage, land reform, expansion and improvement of primary and secondary education). Yet the technical skills and facilities available for the implementation of these reforms are not adequate to the need—hence the crucial importance of programmes of technical assistance.

# Chapter XII

# SOCIAL CONDITIONS IN SOUTH AND SOUTHEAST ASIA<sup>1</sup>

### Introduction

The territories extending southward from the Central Asian highlands and the archipelagos adjacent to them have enough human experience and social problems in common to justify common discussion. The component parts of the region are very different, it is true, extending as they do some 3,500 miles from west to east and a little less from north to south. Their landscapes include rugged mountain ridges, arid high plains and wet low plains, swamps and jungles, and volcanic islands. The people, one-fourth of the human race, are of four major racial stocks, speak several hundred languages and dialects, and maintain almost every major form of political organization, from tribal federations to unions of republics.

This region has never been under a single government or shared the same civilization. Yet, many of its problems today derive from similar causes, and recent studies—many of them made under the auspices of the United Nations and other international agencies—make apparent the essential similarity of the basic social tasks which confront the separate peoples and governments of the region. (At the same time, it will be understood that there are important exceptions to nearly any generalization made in this chapter regarding the region as a whole).

The material poverty of most of the 600 million inhabitants of South and Southeast Asia contrasts with the richness of the non-material aspects of their cultures. When some unusual occurrence, such as the recent political revolutions, stirs the mental energies of the peoples, it becomes apparent that great traditions still exert their vital influence over a wide area of the social life, modified though they are by adaptation to the exigencies of today. These traditions—of Hindu, Islamic, Sinic and even older cultural origin—may often provide a dynamic for modern movements of social amelioration.

On the other hand, some of the traditions, customs and ways of looking at life that prevail in South and Southeast Asia today tend to complicate every movement for social amelioration. Size of family and relations of individuals within the family, systems of land tenure, labour relations and standards of living—all are affected not only by the available resources and the people's ability to make use of them, but also by innumerable inherited sanctions and taboos. Efforts to change the attitudes of different population groups, therefore, constitute a large and important part of the campaigns now under way in South and Southeast Asia to bring about concrete improvements in social living.

In general, the region is today in a state of ferment—political, social and economic. Newly-established nations are charting new courses for their peoples; political and nationalist movements have arisen that are at the same time social and economic movements; popular discontent with conditions of the past is expressed in diverse reactions against landlords, money-lenders, Colonial Powers, Occidentals, alien Asians, etc. Many parts of South and Southeast Asia are changing so rapidly that authoritative studies made only a few decades ago may fail to do justice to the present reality.

# Types of community

The society of South and Southeast Asia is primarily agrarian. In terms of major occupations, the rural communities roughly fall into three main types:

- (1) The rice-growing community, closely integrated because the cultivation of wet-rice lands involves many operations that are performed co-operatively. Neighbours live in closely-settled villages from which all the rice lands are easily accessible. Associated with such occupational co-operation and close settlement are habits of co-operation in other activities affecting the welfare of the families concerned. There is a highly developed respect for law and order.
- (2) The coastal or riverine community, also sometimes engaged in wet-rice cultivation but largely dependent on fishing—another occupation that involves co-operation but one that also offers high rewards to persons of exceptional maritime ability and daring. Such villages sometimes specialize in trade and transportation and become commercial ports.
- (3) The upland farming community, usually less populous and less-closely settled, engaged in dry-land cultivation, in animal herding or in the exploitation of wasteland and forest resources. Systematic dry-land farming by modern methods has rarely been introduced. Because of the heavy seasonal rainfalls, most of the hilly country under forests, unless cleared for other economic purposes, has not given rise to settlement in other than aboriginal communities; extensive exploitation of forest and mineral resources, where it does occur, is under alien management and employs aboriginal or migrant wage-labour.

The village economy serves first the needs of the producer and his family, and secondly those of the village (for the most part, on a barter basis). Any surplus remaining after the first two requirements have been met may be sold for money to the town merchants. In some areas, cash crops (e.g., cotton, jute, oil-seeds) are cultivated to a significant extent. Crafts (e.g., blacksmithing, carpentry, pottery, etc.) comprise a secondary occupation, and exist primarily if not exclusively for the satisfaction of village needs.

Whereas the village economy exists essentially for the satisfaction of its own needs, the town economy is

<sup>&</sup>lt;sup>1</sup> The major countries and territories considered in this chapter are: Burma, Ceylon, India, Indochina, Indonesia, Nepal, Pakistan, Philippines, Thailand, British Borneo, Federation of Malaya and Singapore.

that of the productive unit and the exchange centre, having a monetary basis and catering to a large commercial market outside the town limits. The smaller Asian town serves as a kind of intermediary between the village and the larger town or the city. The larger town and the city display the characteristics of the Western city. They depend for their food supplies upon the villages and in return supply the villages with manufactured products. The large town and the city are also in contact with the outside world and function in the capacity of intermediaries between the village and the world markets, obtaining for the village a wider sale of its agricultural surplus as well as procuring for it such imports as its more prosperous inhabitants can afford.

The characteristic national economy of South and Southeast Asia, like that of most of Asia, is thus more or less dualistic, as a result of the contrast between its village economy and its town economy. "It is not a differentiation merely between two sectors of an integrated economy, as would be the case if a similar distinction were made in the West. It is a distinction between two different economies, with limited points of contact between them."

The peasant villagers following their traditional ways of life are numerically by far the largest groups in the population. The most influential groups are usually those who, for a generation or more, have fully entered into the modern type of economy—as public employees, entrepreneurs or employees in urban industry or modernized agricultural enterprises. Important from the point of view of social change are transitional groups who are in process of modernization—peasants who produce commercial crops for distant markets, or who have left their home villages to work for wages in large-scale modern enterprises but still cling to the traditional outlook of the village.

# Interrelations of social, ethnic and economic groups

Over a large part of the region, the internal government of community relations still rests on the cohesiveness of family and kinship groups, conscious of their common origin. But this familial kind of organization has in the course of time been modified in large parts of the region by the formation of hereditary classes or castes. More recently, growing disparities in wealth through the effects of the money economy have created additional differences in status.

The social stratification of the region—with the Hindu caste system as its most highly developed form—has been associated with a differentiation of economic activities, and has resulted in the formalization of closely-knit groups devoted to particular occupations and trades. The small, upper class groups which, in view of their high incomes, might have become the providers of indigenous capital for trade and industry, did not by custom engage in activities of that type. Their surplus wealth was accumulated to a large extent in the form of hoarded valuables and remained economically unproductive.

It is alien European colonizers—or, rather, the entrepreneurs behind them-who have chiefly supplied large-scale capital for productive investment. The colonial system and the influx of foreign capital resulted in a gradual shift from what was once almost exclusively a subsistence economy to one producing, to an ever-increasing degree, for the world market. In the course of the last four decades, the rate of the shift has accelerated greatly. A large production of food and raw materials for export has been relied upon as an important basis for national income and national revenue. But with the relatively low prices received for these commodities in terms of compensation for the human energy put into their production, such a policy has shown that it may create a social deficit even when the capital invested receives a fair return, and the State its fair share of income from taxes.

Among other consequences of European colonial rule, has been the creation of groups of Eurasians who are generally better educated than the indigenous population and have valuable semi-professional skills, but who pose difficult problems of assimilation under present conditions.

In addition to the European and Eurasian elements, there are, in most countries of the region, large minorities of alien Asians who play significant economic and social roles. Malaya has 2 million Chinese and half a million Indians out of a total population of about 5 million. Burma has 1½ million aliens (Indian in the majority, Chinese, European and Eurasian) out of a total population of between 17 and 18 million. Thailand has 1 million unassimilated Chinese in its population of 15 million; a large Chinese population exists also in the Philippines.

Small-scale commerce and money-lending in the region have been to a considerable extent in the hands of alien Asians. Contemporary nationalism has thus developed not only in reaction against colonialism but also under such complex socio-economic circumstances as the extensive alienation of agricultural land by Indian money-lenders in Burma and the dominant role of the Chinese in trade and industry in Thailand. Anti-Chinese feeling has been evident in Indochina, Malaya and the Philippines, and to a lesser degree in Indonesia, where the special status of the Chinese was shared by Indians and a smaller number of Arabs.

The foregoing situation has developed through the inability or unwillingness of the indigenous classes to enter the channels of business and trade between the primary producers and the consumers. The alien Asian middleman, often himself of peasant origin and lifted out of the labouring class by virtue of exceptional industry and thrift, served to impede that vertical mobility in the indigenous population which elsewhere furnishes the sense of open opportunity and the hope and possibility of improvement of status.

Functionally distinct from the alien Asian middleman, but easily confused with him when both groups belong to the same nationality or language group, is the alien Asian contract labourer whose competition the economically weakest groups in the indigenous population feel. Contract labourers were introduced in large numbers from southern China and southern India into

<sup>&</sup>lt;sup>2</sup> Economic Bulletin for Asia and the Far East, first quarter, 1951, p. 20 (the preceding two paragraphs are based directly upon this same source).

many parts of the region to meet the manpower needs of the expanding plantations, mines, and other large enterprises. The contract workers usually lived (at first) in compounds, but were often encouraged, on the expiration of their contracts, to settle in the vicinity of the estates so as to ensure easily available supplies of surplus labour. Many became cultivators of commercial crops, either on their own account or on contract for the plantations, and so came into direct competition with indigenous growers. There was, moreover, a certain amount of competition for jobs, since neither indigenous nor alien cultivators were busy on their own holdings all year and both frequently had sons for whom land-holdings might not easily be found. Thus, the combined labour surplus held down wages and also the local market price of commodities grown on the local soil. The resulting tensions coalesced with those produced by the competition of aliens in the fashioning of simple consumer goods, such as textiles, household utensils and tools. There is a tendency to limit (as Thailand, Ceylon and Burma have already done) the alien's access to work opportunities by reserving for the indigenous worker those types of employment for which he is qualified.

The region is thus faced with difficult problems of social structure and ethnic relations which are simultaneously problems of economics and of nationalism. An economy so largely built on alien capital, on alien trade and on alien labour cannot without great hardship suddenly be converted into a strictly national one. The difficulties occasioned may be expected to occur for some time to come, as an inevitable by-product of economic nationalism.

Another special problem in some of the countries of South and Southeast Asia is that of the "aboriginal" populations, who are to be found at the very lowest economic and social levels. In India, the aborigines are said to number somewhat under 20 million and to constitute about 6 per cent of the total population. Most of the aboriginal groups are remnants of tribes that inhabited the countries many centuries ago before invading peoples subjugated the territories. In forested and mountainous areas, the aborigines withdrew from the valleys and moved up the wooded hills, where they succeeded, to a large extent, in maintaining their tribal autonomy, and engaged in intermittent warfare with the settled valley peoples. The livelihood of the aboriginal tribes was based mainly on primitive agriculture; in more recent times, the forest and mountain dwellers among them have frequently engaged in various forestbased trades, such as logging and charcoal production; from the latter, they have frequently branched into primitive mining and foundry-work. Where, for geographical or historical reasons, withdrawal of the aborigines into more remote areas was not feasible, they continued to live among their conquerors, occupying the lowest stage in the social hierarchy and performing the least pleasant occupations, such as carrying water, sweeping streets, distributing manure and a multiplicity of other menial duties. Occasionally, aborigines have become nomadic in the performance of tasks such as tool repairs or popular entertainment.

The memory of the historical events which have resulted in the present status of the aborigines has

largely disappeared and the process of assimilation is continuing at an accelerating pace. However, a large proportion still lives in traditional isolation and continues to follow their tribal traditions and social organization.

Within the Hindu society, a special problem is also presented by the former "untouchables" who are at the bottom of the caste system (in recent censuses the "untouchables" have been largely classified under the category "scheduled castes", while the aborigines have been classified as "scheduled tribes". Some observers consider that the "untouchables" are in good part at least former "aborigines", but the evidence is not clear). They have traditionally suffered from rigid segregation and confinement to menial occupations, though throughout history religious leaders and social reformers have sought to abolish the system or to modify its rigours. The present Constitution of the Republic of India outlaws "untouchability". Efforts are being made to ensure equal rights and to encourage education and social services for former untouchables, who number about 25 million.

### POPULATION TRENDS

Asia is the most densely populated continental area of the world, and South and Southeast Asia is still more densely populated than Asia as a whole. Ceylon, India, Indochina and Indonesia have in general less than one-third of a hectare (less than one acre) of arable land per capita of total population. Furthermore, the population is spread unevenly. There are intense concentrations along the river deltas, while some of the inland parts—particularly those with mountains, jungles or arid zones—have but a sparse population. In many cases, however, the uneven distribution of population is due not only to differences in the material advantages of the land and in the natural obstacles to settlement, but also to historical factors, including, for example, the advantages to ruling Powers of settlement in easily accessible coastal regions. In the archipelago countries, different islands have strikingly different densities. As noted in chapter II, there are about 360 persons per square kilometre in Java and Madura, but only about seventeen in the rest of the Indonesian islands. In the Ilocos provinces of the Philippines and around Manila, land is so closely subdivided that farmers can barely make a living, while large tracts in the interior of Luzon, no less fertile, have only recently been brought within the frame of commercial agricultural production and close settlement.

In pre-colonial days, epidemics, natural calamities, wars and intertribal strife restricted the size of populations. The total impact of these factors has been considerably reduced, and, with generally declining death rates, population is now swiftly growing. In eleven years, from 1937 to 1948, in spite of war and civil disturbances, the estimated population for the region (as defined in this chapter) rose from approximately 526 million to 595 million, an increase of 69 million people. Moreover, in several parts of the region, the rate of growth has undergone sudden acceleration. Ceylon's death rate dropped precipitously from 20.3 in 1946 to 12.6 in 1950, while the birth rate slightly increased from 38.4 to 40.3, with the result that the

country now has a rate of natural increase of nearly twenty-eight per 1,000 (one of the highest in the world). For Malaya, a rise in the rate of natural increase from an average of eighteen per 1,000 in 1931-37 to twenty-eight per 1,000 in 1951) has been reported. Such rapid accelerations in population growth may be largely attributed to the extension of modern public health measures, which reduce death rates while birth rates continue at the characteristically high levels of non-industrialized, agrarian societies (see chapters II and III). It seems quite probable that more and more of South and Southeast Asia will undergo this process in the near future—requiring rapid expansions in food, housing, education and other essentials in order to maintain even present standards of living (it should be pointed out, however, that the Government of India, with the assistance of WHO, is considering the possibility of introducing a programme of family planning).

One noteworthy recent population development is the rapid growth of cities, which has been accelerated by war, civil disorder and displacement of persons by political causes. It no doubt will continue as present policies of economic development mature. Some of the large cities have more than doubled their population in the last two decades: Calcutta from 1.8 to 4.5 million, Delhi from 0.5 to 1.2 million, Karachi from 0.4 to 1.2 million, Djakarta (formerly Batavia) from 0.5 to 1.5 million. In consequence, tremendous social problems of urban housing, sanitation, employment and general welfare have been created.

The partition of India led to the migration not only of refugees without means of subsistence but also of merchants, civil servants and others who drifted to the cities in search of new occupational opportunities. The separation of Singapore from the Federation of Malaya similarly had for one of its immediate effects a considerable growth of the city's population. In the Philippines, the number of towns with a population of 25,000 and over increased from four in 1939 to eleven in 1948, and that of cities with 100,000 or more inhabitants from three to eight. The urban population of Ceylon increased from 736,000 in 1931 to over a million in 1946. In general, the search for personal security in times of trouble, together with pressure of rural population upon the land and growth of a landless peasantry, probably account for more of the recent increases of urban population in South and Southeast Asia than does the process of industrialization. This would seem to be confirmed by the widespread unemployment in cities.

# HEALTH

Among the major diseases receiving government attention, malaria is generally accorded first place in the region. Because the governments find themselves obliged to take drastic steps to increase the national income, they recognize the necessity of taking effective action against that cause of morbidity, which particularly saps the strength of the people and lowers their productive capacity. "Malaria," to quote a committee of experts on that disease, "still holds back or makes impossible, food production in underdeveloped areas; it still interferes seriously with industrial and agricul-

tural activities in many tropical and subtropical areas; and it still takes a high toll of victims in infancy and early childhood." They add: "Malaria is now highly vulnerable to planned attack."3 Rapid strides have been taken to reduce this disease in particular areas.

The control of tuberculosis, which is associated with malnutrition, is rendered difficult because of the poverty of the people and because of overcrowded homes in the countryside as well as in the cities. A sample tuberculin test made during 1948-50 in Madanapalle, South India, tended to confirm an estimate previously made by experts that the mortality rate from this disease in India is about 250 per 100,000. Inadequate income is the crux of the matter. Insufficient provision for treatment and prevention is also an economic problem: to furnish qualified staffs of medical and subsidiary personnel, to establish adequate hospitals and sanatoria and to conduct educational campaigns commensurate with the prevailing ignorance are tasks calling for great financial resources. Most of the apparatus for effective control of tuberculosis has yet to be built. In India, for example, there are as yet few facilities for specialized diagnosis and for specialized treatment; the clinical services provided in most provinces have been described as "elementary in the extreme".4 Other countries in the region do not even have provision for specialized medical training such as is given in a number of Indian universities.

Maternal and child health have also received special attention in the last few years in such South Asian countries as India, Ceylon, Burma and Thailand. Because of the unsatisfactory state of birth registration in the region, there are few reliable statistics of maternal and infant mortality, but these are believed to be about ten times as high as in New Zealand, the United Kingdom and the United States.5 "Lack of care of the mother during delivery, together with ignorance of the basic principles of the care and feeding of infants, are apparent everywhere."6

Among other diseases that give particular concern to the governments of the region at the present time are syphilis and yaws. The Indonesian Government looks upon the latter disease as a major national problem because it affects an estimated 15 per cent of the population and is a cause of lasting physical disability. One-half of those afflicted are children. Plans for dealing more effectively with this disease, with use of penicillin, are under way also in India, Ceylon and the Philippines. Burma, likewise, despite the disturbed condition of the country, organized an anti-venereal and anti-yaws campaign in 1949, centred upon a modern clinic in Rangoon but extending to nearby rural

<sup>&</sup>lt;sup>3</sup> Expert Committee on Malaria, Report on Third Session, Geneva, August 1949, WHO Technical Report No. 8, Geneva, May 1950, p. 7.

<sup>4</sup> Ibid., p. 96.

<sup>5</sup> Work of WHO, 1950; Annual Report of the Director

General to the World Health Assembly, Geneva, April 1951,

<sup>&</sup>lt;sup>7</sup> The dramatic effect upon the whole life of a community that may be achieved by eliminating yaws is mentioned above in chapter III, p. 22.

One of the major problems in the health field in South and Southeast Asia, as in other less-developed areas (see chapters X and XI) is the unequal availability of such medical services as exist to different segments of the population. Often there are good clinics and medical practitioners established in the cities while wide rural areas do not have a single midwife or nurse with modern training. In general, however, there have never been enough medical men, technicians or public health workers to meet the needs even of the densely populated districts.

A recent study made for the Fourth World Health Conference illustrates the urgency of the region's need for more trained medical personnel. A survey made in Indonesia in 1949 showed that the country needed at least 2,000 graduate physicians, dentists, pharmaceutical chemists, research chemists, sanitary engineers and other professional men. The total number available was only 600. The estimated need for undergraduate sanitary inspectors, laboratory analysts, assistant pharmacists, dieticians, midwives, nurses, etc., was found to be about 1,500; the number actually available was only 425. Even for the subordinate but nevertheless essential personnel—attendants, probationers, laboratory assistants, vaccinators, and the like—the discrepancy between the number needed and the number available was found to be one of more than 40 per cent.8 "The shortage of trained personnel," says the report, "is extremely serious." Yet, the Public Health Administration of the Netherlands Indies was in some respects in advance of that in neighbouring countries.

By contrast, the provision for professional training in India seems to have been more ample: there are twenty-eight medical schools affiliated with different universities. Here too, however, the total supply of trained medical personnel has never even remotely matched the most urgent needs. "In spite of the long duration of the existence of these colleges, . . . till very recently the colleges were content to turn out undergraduates as general practitioners, and little or no attempt was made at specialization or in the development of the many ancillary branches so very necessary for curative and preventive medicine in the field of public health."9 The training of nurses in India, likewise, needs to be greatly expanded, though there are several good schools now operating; but the greatest lack in proportion to need is that of dentists and laboratory technicians. 10 Substantially the same story comes from all the countries of the region, though the degree of insufficiency of training facilities is not the same everywhere, and though some of the countries offer specialized training (as, for example, the Philippines in the combat of leprosy) of which students from neighbouring countries may take advantage.

Poverty and lack of public health facilities form a vicious circle in South and Southeast Asia, as else-

8 WHO, Indonesia-Education and Training of Medical

10 Ibid., pp. 6, 7.

where. So long as the per capita production is extremely low, the public revenue may not suffice to provide adequate services. But the low production per capita itself has for one of its causes a high incidence of sickness and morbidity which are susceptible of control by public health measures.

### LEVELS OF CONSUMPTION

To the extent that reliable data are available, it is clear that large proportions of the population in the region as a whole live in a state of primary poverty: their income, considered from the standpoint of their established consumer habits, does not suffice to keep them in a state of physical health. Of the rest, all but a few small privileged classes live in secondary poverty: the slightest deviation from the pattern of concentrating all their income on the satisfaction of primary necessities (indulgence in a feast, an overlavish funeral, expenditure on medical treatment or on education) is liable to result in the lowering of their intake of food to the danger point, or to plunge them into a debt that may have serious consequences in the future.

If the situation in this respect has always been bad, it has taken a turn for the worse since the end of the Second World War. A table compiled by the Economic Commission for Asia and the Far East shows cost-ofliving indices several times as high as in 1938, and still rising, in most of the countries, since 194811—an advance which neither the increase in the prices received by the primary producer nor the increase of wages has approached in magnitude, though both have here and there been considerable. The rise in costs has been especially great in the cities. Food costs in Bangkok and Djakarta, for example, have been thirteen or fourteen times higher since 1948 than they were in 1938. Saigon, also usually an exporter of food, registers a trebling of both food and general living costs since 1946.

The subject was discussed at the seventh session of the Food and Agriculture Organization, on the basis of a report by its secretariat. The decline in per capita food consumption since prewar years was noted for India and several other countries of the region, except for the Philippines, where food consumption since 1948 seems to be above the prewar level. Where an increase in the per capita intake of food was observed, this was mainly in cereals. The per capita consumption of fats and oils, though it exceeds the prewar level in Ceylon, India, and the Philippines and has lately risen in several other countries, still is very low.12

In South and Southeast Asia, prices of many commodities reflect the fluctuation in foreign rather than domestic demand. Instead of lowering the price to local consumers, increased production of these commodities sometimes raises food prices, because the demand for food rises proportionately with the increase in employment and income. In this way, recent large sugar crops in the Philippines, bringing the exportable surplus almost to prewar level, have forced the Government to negotiate for increased rice imports—not because the

and Public Health Personnel, 27 April 1951, p. 3.

Sir Arcot L. Mudaliar, M.D., LL.D., S.Sc., Vice-Chancellor of the University of Madras, in a background paper on "Education and Training of Medical and Public Health Personnel in India", submitted to the Fourth World Health Assembly, 1951, p. 2.

<sup>&</sup>lt;sup>11</sup> Economic Bulletin for Asia and the Far East, first quarter, 1950, I, 1, Bangkok, August 1950, p. 52.

<sup>12</sup> FAO, Conditions in Asia and the Far East, Report to Seventh Session, ECAFE, 18 January 1951, pp. 17-19.

production of rice has lessened, but because more people can eat more regularly.

The effect on consumption of higher costs is, of course, especially great in the case of commodities in which the populations of South and Southeast Asia are not self-sufficient. This is strikingly illustrated by the differences in the postwar consumption of textiles, as between India and Pakistan on the one hand, and, on the other hand, neighbouring countries that have to import this commodity. The consumption has been estimated by taking the volume of textile production and adjusting for imports and exports.

Cotton, rayon and wool textiles available for consumption13
(in kilogrammes per capita)

| Country            | 1938 | 1948 | Increase or<br>decrease<br>per cent |
|--------------------|------|------|-------------------------------------|
| India and Pakistan | 2.2  | 2.1  | <b>-</b> 4.6                        |
| Ceylon             | 2.6  | 1.2  | -53.9                               |
| Burma              | 1.5  | 1.1  | -26.7                               |
| Indonesia          | 0.9  | 0.6  | -33.3                               |
| Indochina          | 1.1  | 0.5  | -54.6                               |

The per capita intake of calories in Southeast Asia is estimated as generally about two-thirds of what it is in the economically more fully developed countries of Europe. In India, the typical intake is less than one-half that in Australia, New Zealand, Argentina, Ireland, Denmark, the United States of America and many other countries. The consumption of animal protein is almost negligible except in Pakistan, where it is about one-fourth that in France, one-sixth that in Australia and New Zealand. India, in spite of its tremendous livestock population, has one of the lowest protein intakes of the fifty-nine countries that have recently reported on these facts to the Food and Agriculture Organization.

In the region under discussion, both countries with a relatively high and those with a relatively low caloric intake appear to have serious deficiencies in consumption of the so-called "protective" foods—that is, foods high in protein content and foods containing other important nutrients, especially salts and vitamins. The high mortality of infants and of women in childbirth has been traced in part to this lack. Improvements in dietary habits that have taken place as a result of education have not yet reached the poorer classes, in town or country. Apart from other aspects, such as loss of nutrients through processing (rice), the problem is one that is to some extent associated with specialization of food production. The more varied diet available to self-sufficient farming communities has often been sacrificed to exclusive cultivation of market crops; and this tendency has increased with population pressure and the decrease in the size of agricultural holdings. The Indian or Malay peasant, when his holding is small, may devote all—or too large a part—of it to the principal food or market crop. If he can obtain from a small plot of land a heavy crop of yams, cassava, sago, plantains, maize or other starchy foods that fill the stomach though they are poor in nutrients, he will tend to do so. Where the economic pressure is less severe, the gardens of villagers often display a rich variety of mutually complementary crops, cultivated solely for home consumption.

Nearly all the governments of the region are giving attention to the large potential supply of fish as an important source of protein, calcium and other necessary ingredients of a balanced diet. Animal foods are also under consideration, but they are expensive when land that might be used for cultivation of crops has to be devoted to grazing. Dietary reforms depend not only upon changes of attitudes towards new foods but also upon the practical possibilities of having the new foods available locally and at costs that can be borne by the low-income population.

#### Housing

Concerning the social effects of poor housing much less is known than concerning those of poor nutrition. This is true of all climates, but especially of the tropical and subtropical areas where insufficient or deficient shelter does not immediately produce suffering from exposure and where overcrowding is to some extent mitigated by the fact that both occupational and domestic activities take place largely out of doors. However, considerable spade work has been done under both national and international auspices demonstrating the relation between poor housing conditions on the one hand and debility and low productive power on the other.

In South and Southeast Asia, bad housing conditions are common in both rural and urban areas, and have a long history. Primitive modes of construction still prevail over a large part of the region. For one or more families to occupy a single room is the rule rather the exception; and that room is liable to be insufficiently protected from wind, rain, dust and vermin. Facilities for storage of food and washing of person, clothes and dishes are largely lacking. In the Malay countries, villages often are built in a single row over a stream which conveniently serves as a drain. Elsewhere, even in quite large villages and towns, there may be no drainage at all. Wide differences exist, of course, in this and other respects. In Indonesia streets tend to be wider, and a relatively high degree of order has long been enforced. Taking the region as a whole, however, but for a few exceptionally favoured communities and districts, the great majority of the people live in slums, rural or urban, or in unsanitary surroundings.

Administrations often have been concerned with reducing the fire hazards in urban districts by setting up minimum standards for house construction; but because of the people's poverty, even these elementary regulations could not always be enforced. In some cases administrative agencies have tried to stimulate better housing by setting up model dwellings or by making suitable building materials available at a low cost. Well-known architects and town-planners have been invited to draw up plans and to redesign the layout of towns and whole districts, frequently through the planning of satellite towns which would permit reduction of

<sup>&</sup>lt;sup>18</sup> The figures are, of course, only approximate. The low per capita consumption of textiles is partly explained by the fact that much of the region lies in the tropics. But the standard of cloth consumption in the region as a whole reflects extreme poverty; the decrease over the ten-year period shows the effects of the various conditions that have reduced imports.

<sup>&</sup>lt;sup>14</sup> See pp. 51-52.

excessive population densities in the urban centres. Because of the prevailing poverty, however, there is little to show for all these efforts, as far as the housing of the common people is concerned.

Light construction from local materials and frequent replacement of outworn or damaged structures is regarded by some experts as the only feasible method of providing the shelter needed for vast populations. Other experts consider that more lasting types of construction alone can produce a permanent remedy: though initial costs will be higher, it will be easier to maintain modern standards of sanitation. The second view is held mainly with regard to the rehousing of urban populations. Those who advocate brick walls, tile roofs and concrete bases admit that for the rehousing of rural slum dwellers the cost of such construction is, for the present, prohibitive — between Rs.3,500 and Rs.5,000 for a family unit in northern India, for example.<sup>15</sup> In rural areas, a more practicable approach, now being tried in several countries in connexion with rural resettlement and community development schemes, is to "help the villagers to help themselves" by encouraging the construction of sturdier and better ventilated huts, more widely spaced and with sanitary latrines, but using the traditional materials and patterns and avoiding extra expense. There is evidence also that such rural housing projects are more effective when combined with improvements in education, health, agricultural techniques, etc., in an over-all community development programme.

In the towns and cities, the economic problem of providing the labouring masses with decent dwellings is of colossal proportions, and has been aggravated by the recent great influx of refugees and migrants from the countryside.

A great disparity between the rates of population increase and those of residential construction has been created, and the housing shortage-already acute a generation ago-has been accentuated. Since the war, the cost of nearly all building materials has increased. In many localities, cement, steel, plumbing supplies, even timber cannot be obtained at all for housing projects. In the new city quarters, boards or tin sheets, when obtainable, sometimes take the place of the villages' walls of matting or of mud; but in most respects the industrial newcomer's dwelling is of flimsy construction and quickly becomes squalid with use. In the older quarters, the public authorities often find it difficult to compel landlords to repair tenements unfit for human habitation when the necessary materials are known not to be available at reasonable prices; or else the landlords escape their obligation by selling to a worker who will then attempt to raise the interest on the necessary loan by sharing with others the space that is insufficient for even a single household.

The crux of the problem thus lies in the discrepancy between the cost of house construction and the income of those to be housed. Some municipalities, in this region as elsewhere, have tried to extricate themselves

from an impossible task by frankly concentrating their effort on the supply of additional dwellings for families of a somewhat higher economic status than that of the average wage-earner. They see to it that materials and credit, as well as sites laid out in keeping with modern planning ideas, are available to would-be builders on reasonable terms. But they recognize that this type of activity only touches the fringe of the problem. Most observers are agreed that poor housing conditions, like poor nutrition, can be dealt with effectively only as a part of comprehensive social and economic reforms. Yet, "although South and Southeast Asia now place greater emphasis on economic development, better housing does not automatically result". There is need for over-all national policies, but there is need also for intensive study of the specific factors that affect the housing of the people. And that study, as far as this region is concerned, is not yet far advanced.16

The United Nations Mission of Experts which recently visited the region reported that the efforts of the various governments in this field were as yet uncoordinated to other plans and projects, sometimes based on faulty assumptions and lack of reliable information, and often disappointing in their results.<sup>17</sup> However, almost all of the governments are seriously endeavouring to improve the situation.

### EDUCATION

The generally low levels of education in South and Southeast Asia are indicated in chapter VI in this report. Important advances have recently been made, notably in Ceylon and the Philippines, but progress is beset by many formidable obstacles, both economic and cultural.

As far as primary education is concerned, most of the governments in the region endeavour to meet a great demand for new schools. At the same time, they are aware of the futility of opening more schools unless elementary education is long and continuous enough to produce literacy in a much larger proportion of the pupils than has been the case in the past. There is emphasis on the need for social and civic education, with the aim of raising the ability of the people to share in the national political life and, especially, to take an active part in local affairs, as well as on the need for greater attention to the teaching of domestic and occupational skills, appropriate to the circumstances of the community. The widespread need for vocational training is also recognized.

These needs are too urgent to be met solely by reliance on the gradual improvement of the elementary school system. Governments of the region have commenced to implement far-reaching plans of adult and fundamental education. The emphasis in many cases is on literacy; but according to the nature of their major problems as they see them, the various governments also work on other aspects.

<sup>15</sup> ILO, Report of Industrial Housing Sub-committee of Standing Labour Committee, New Delhi, 1946, p. 6, quoted in ILO Proceedings, Asian Advisory Committee, Second Session, Bandung, 18-20 December 1950.

<sup>16</sup> United Nations, Report on a Mission of Experts on Tropical Housing to South and Southeast Asia, November 1950 to January 1951, Social Commission, Seventh Session, 1 March 1951.

<sup>17</sup> United Nations, Low Cost Housing in South and Southeast Asia, Report of Mission of Experts, Department of Social Affairs, New York, 16 July 1951, p. 23.

In secondary and higher education, development, though uneven, has been considerable. Its significance lies in the desire of newly independent peoples to develop as quickly as possible the professional and technical talents essential to the conduct of public and private affairs in the modern world. The rapid growth of university teaching, as the governments and leading citizens see it, is an urgent necessity. The lack of trained personnel for almost every part of the apparatus of modern living is so great that, should it be necessary, it is considered better to postpone the full implementation of compulsory primary schooling until the most important needs in the higher categories of education have been met.

There are, of course, wide divergencies in higher education between the different countries of the region. The number of colleges and universities and their respective enrolments are not necessarily good indices of the status of higher education in relation to modern needs, since the great majority of these institutions are devoted to the humanities and are not equipped for teaching scientific and technical subjects; a few, however, are eminent in the latter respect. In the past, opportunities for gaining professional prestige have been few outside the fields of government, law, teaching and theology. The status-relations that have been established are difficult to overcome. They are recognized as a serious problem and are now being corrected to some extent by the increased importance that is being attached to all branches of medicine and public health, economics and the other social sciences, and not least to the technical fields and the sciences connected with them. Efforts are also being made by governments to deal with the traditional divorcement of higher education from the material aspects of life, which has prejudiced the educated not only against manual labour but also against the practical application of technical skills.

#### INCOME AND EMPLOYMENT

As has been indicated in the preceding pages, the elemental problem of South and Southeast Asia is the all-prevailing poverty of most of the people. It is of long standing and has coloured all social attitudes and customs. Compared with it every other social deficiency is minor. All the causes of this poverty cannot here be traced; but to ascribe it to any one cause alone, whether it be over-population, landlordism, colonialism, lack of capital investment, indebtedness, ill health, illiteracy, caste systems or beliefs and habits of the people, is obviously to oversimplify the issue.

#### Income and wages

A few additional facts about the level of incomes, and especially wages, will help further to illustrate the poverty of the region. Unfortunately, available data on this subject are so sparse that no conclusive comparative statement can be essayed. However, estimated per capita income in constant prices for many countries in the region in 1949 and 1950 were still below the prewar figures, Ceylon being an outstanding exception. In the case of Japan and the Philippines, the rate of recovery has been impressive. Indonesia and Malaya have probably benefited on the whole from a rise in prices of export commodities. On the other

hand, the situation in Burma and Indochina, for example, has not improved in recent years.

While money wages have generally gone up, they have not in a number of countries kept up with the rise in the cost of living. Real wages in the Philippines and India have not as yet reached the prewar level. Notable improvements have, however, been reported for Ceylon and more recently for Malaya and British Borneo. There has also been a tendency in some countries to make extra bonus payments in addition to wages.

Wage rates vary more widely than in the fully industrial countries. In the same industry and locality there may be a divergence of 100 per cent between the wages paid for the same work by different employers especially when one of them has the right, usually acquired by an advance of money, to command the whole family of an employee without additional payment. Moreover, the same rigid wage schedule is often applied by an employer to workers of widely differing functions and attainments. Where the modern side of the economy is dominated by one industry, as in parts of Malaya and Sumatra, wages in other industries may be related to that industry's standard remuneration for unskilled labour, while rates in other parts of the country have a far wider range. Averages are misleading when it is not known how large a proportion of the working population covered receives the lowest, the highest and the median wage. Thus, in Thailand, wages of unskilled rural labourers vary by 100 per cent, in the Philippines by several hundred per cent. In Indonesia a sharp distinction exists between the wages paid by the large estates under foreign management and by the indigenous growers of the same commercial crops—the reason being that the product of the indigenous growers tends to be less standardized or of lower quality and brings a lower price. In the Philippines and in Ceylon, probably because of the larger numbers of secondary industries, wages in traditional employments tend to be higher than they are in neighbouring countries.

A report of the Asian Advisory Committee mentions the following major depressive influences on wage levels:

- (1) Large surplus of population on the land, sometimes offering an all but inexhaustible supply of agricultural labour;
- (2) Consequent downward pressure on industrial and urban wage rates exerted by extremely low levels of earnings in the rural areas;
- (3) Steady growth of population and consequent increase in the supply of unskilled labour;
- (4) Slow and limited economic development with consequent lack of adequate avenues of employment to absorb the steadily expanding wage-earning class;
- (5) Hiring of workers by jobbers who exact from them a heavy commission;
- (6) Ignorance and illiteracy of the workers, in some areas unfamiliarity with the money economy, awareness of weak bargaining position, and consequent willingness to work on any terms offered.

Mention is made, further, of the depressing influences of custom and tradition on wage rates—for example, the use of supplementary payments in kind; the loans by which certain classes of employers (especially in the small industries but also in agriculture) keep workers in their debt, thus preventing them from seeking other employment; the exploitation of members of the worker's family; and the lack of training facilities that would help the unskilled labourer to move on to a better-paid occupation.<sup>18</sup> These influences, in spite of much legislation to control them, still operate with considerable strength in South and Southeast Asia. One other factor deserving mention is that the employment of skilled workers in modern industry was in the past largely limited to Europeans and members of privileged minorities.

The impetus for the improvement of labour conditions did not come primarily from the higher ranks of labour, except in the cities. It came to an unusual extent from governments impelled to do something about the matter. In recent times, the increased complexity of productive processes, both in commercial agriculture and in industry, augmented the capital investment in modern enterprise and brought to the scene scientifically trained personnel from Europe. Under the influence of the new type of manager, many of the large concerns learned that it was in their interest to reduce the labour turnover by improving conditions of labour and by bringing wages to a level permitting decent living standards. The combination of these tendencies has led to minimum-wage legislation in most of the countries. Burma, India, Pakistan and the Philippines have set up industrial tribunals whose decisions are binding.

If information on wage levels is scanty, that on the earnings of self-employed cultivators, share-croppers and artisans may be said to be almost entirely lacking. The income of these classes is often made up of different categories of earnings, including both cash returns and payment in kind, perquisites such as a share for their own use in land cultivated for others, and often, free access to common or wild sources of food and fuel. The same return which one tenant farmer receives for his own labour may be received by his neighbour for the combined labour of himself, his wife and three or four other members of his family. One may use a good part of his time and that of his family in supplementary pursuits—as craftsman or carrier or public servant-while the other derives all of his income from cultivation of the land. An owning farmer who, in debt to a trader, is obliged to sell the trader most of his output below market price may be worse off than a share-cropper under a lenient landlord. Generally, however, the share-cropper is poorer than the tenant, and the tenant poorer than the owning culti-

Conditions of work and employment in agriculture

Lack of security of land tenure in South and Southeast Asia is often considered one of the greatest causes of unproductive land uses, of underemployment and of social unrest. Considerable areas still are close to

the tradition of shifting cultivation under which ownership itself is a somewhat vague concept. The cultivator has a right to the land he has cleared as long as he uses it, the right also, as a rule, to return to it after a period of years when it will have recovered something of its former fertility. Many agricultural people in less-developed areas have been traditionally more concerned over this right to use than over the right to own-right to a fruit-bearing tree or to a fishing location, for instance, rather than right to a piece of land that is of no value until it has been cleared and prepared for use. With this background, and in the absence of improvements costly in labour, the peasants of some areas still are rather unaware of the advantage of long-term tenures. The prevailing short tenures in fully settled areas, on the other hand, result in the main from population pressure and land hunger. In some parts of the region, they drive rents and land values to fantastic heights. To preserve the market value of his land, the owner in some parts of India has charged a rent no tenant could afford to pay and which, in fact, he never fully collected, repeating the performance from year to year.

Most of the tenancy agreements are on a sharecropping basis—or, rather, the tenant pays his rent with an agreed portion of the crop. The landlord divides his farm or estate into segments which he lets to tenants who assume responsibility for all operations. Sometimes the landlord provides draught animals, tools and seed. Where the holding is small or the rent particularly high, the advance of grain to feed the tenant's family until the harvest is reaped is part of the agreement—a part without which the tenant often cannot exist, as his own share in the produce is not large enough to see him through the year. The landlord, by means of this advance, obtains a hold over the tenant that permits him to exact additional services, as occasion may arise—services not specified in the (usually) verbal agreement. Numerous studies have shown that such services (and sometimes also gifts, expected on such occasions as the entertainment of guests by the landlord), can be extremely onerous. The demand for them rises with increased tenant competition for the land.

In their details, the customary tenancy arrangements differ widely. Some reach back for centuries, some have been influenced by the presence of large estates in the vicinity or by the marketing requirements for particular crops. Sometimes the tenant engages for part of the time in auxiliary labours. For example, in addition to working a holding for one landlord he may also sell his services as a labourer to another. Sometimes (this system is common in the Philippines) a tenant will lease more land than he can work and then sublease part of it to others at much higher rentsa speculative procedure that may eventually elevate his status to that of a large tenant farmer or an owner, but is quite as likely to plunge him into destitution, particularly if he must borrow the money or grain with which to pay the rent on the larger holding.

Another method of raising cash, often resorted to in Java, is to lease a piece of land, then immediately sublease it to a dealer in the crop to be raised (usually rice), who will employ the original tenant as a share-

<sup>18</sup> United Nations, Report on Problems of Wage Policy in Asian Countries, Asian Advisory Committee, Bandung, December 1950, pp. 1-2.

cropper with payment of an advance on the cultivator's prospective share. Where a peasant is entitled to a share in common land, as is often the case in Java and in parts of Indochina, he may pawn his right in it to a merchant-moneylender for whom he subsequently works as a share-cropper. In short, there are many variations on the central theme of insufficient land and indebtedness.

High productivity of the land does not necessarily ensure a high income for the peasantry. It usually is an effect of population pressure and may be obtained at a disproportionate cost in labour. Having passed through several hands, a piece of fertile and valuable land is as likely as not in the end to become part of the dispersed estate of an absentee landlord, who lives in a town and, either personally or through an agent, can easily replace a refractory tenant. Sometimes a change in tenancy occurs merely because the owner has discovered a potential tenant family composed of more members, hence more likely to get the last ounce of return from the land by their joint labour, without additional cost to himself. It is true, of course, that landlord-tenant relations in many parts of the region are regulated by customary law; but except where there is plenty of land still to be had for the clearing, as in parts of Thailand and Burma, that law is rarely kind to the man who is without property of his own and therefore forced to accept terms originally, perhaps centuries ago, fixed by the law of conquest.

The social and political influence of the large landowners has been much greater than that of industrialists in South and Southeast Asia, and land legislation is generally far less advanced than is labour legislation. The increase of tenancy over owner farming has been a phenomenon common to practically the whole region, following upon economic distress and growth of population pressure. It was discussed as a threat to agricultural production at the Asian Regional Conference of the International Labour Organisation,19 and is recognized as a serious problem in reports of the Food and Agriculture Organization.

Since the war, popular demand for thoroughgoing land reforms has increased all over South and Southeast Asia. It has been reflected in political independence movements and partially explains a number of popular movements and civil disturbances that have followed upon independence.

Ceylon is relatively more fortunate than other countries of the region in that it suffered less severely from the war and its Government has been able, without interruption, to pursue a continuously more effective programme of land and related reforms in the interest of the indigenous peasant population. In Pakistan the pressure of population on cultivable land is much less severe, and the problem of absentee landlordism is not serious.

The reform of land tenure currently occupies much of the attention of governments throughout the region, with particular emphasis on transfer from tenancy to peasant ownership. In India, where one-third of the agricultural population have been tenant cultivators and another third agricultural labourers,20 laws providing for the transfer of about half of India's total cultivated area to peasant ownership are under consideration or already enacted.21 In Burma, where by 1939 one-third of the land had fallen into the hands of money-lenders (largely Indians) chiefly as a result of the depression, a Land Nationalization Act of 1948 has given all holdings above a certain size and all holdings of non-agriculturalists into the possession of the Government for redistribution to peasants.22

Change in ownership or tenure rights on cultivated land will not, of course, increase the acreage of land available for production in a land-hungry area. Various plans of population resettlement and of land reclamation are also under consideration, in order to establish a more rational adjustment between population and resources.

## Rural indebtedness

The vital system of credit in the rural areas has been supplied to a large extent by moneylenders. Their business activities are usually concerned with crop cultivation, jungle produce and cottage industries. The credit which they extend is usually paid off by produce and/or labour. Their rates of interest are exorbitant, frequently 100 per cent or more, and repayments may involve serious labour exploitation.

The exact extent of rural debt resulting from this situation, while admittedly of vast proportions, is not accurately known. The following data on the Madras province of India will serve to illustrate the seriousness of the problem in one area.23

Relative position of different classes of agriculturists in the Madras province, India, 1939-1945

|      |  | Percentage<br>of total<br>number of<br>aricultural | Proportion of families free from debt or which com- bletely cleared | Per capita<br>debt<br>Rs. |       | 325 | Percentage of total debt owed by the class in |      | Surplus (+) or deficit (—) of income over expenditure per family |
|------|--|--|---|---------------------------|-------|-----|---|------|--|
|      |  | families   | debt (per cent)   | 1939                      | 1945  |     | 1939  | 1945 | in 1945 Rs.  |
| I.   | Big land holders (25 acres and above)        | 2.9  | 50.0  | 188.5                     | 113.3 |     | 14.4  | 10.8 | +1118.9  |
| II.  | Medium land holders (between 5 and 25 acres) | 24.6   | 37.7  | 78.8                      | 59.4  |     | 43.5  | 41.0 | + 117.2  |
| III. | Small land holders (under 5 acres)           | 44.3   | 34.0  | 42.8                      | 37.6  |     | 35.3  | 38.7 | - 0.9  |
| IV.  | Tenants                                      | 13.2   | 33.7  | 20.5                      | 21.3  |     | 5.4   | 7.0  | 44.1   |
| V.   | Landless labourers                           | 15.0   | 33.3  | 5.7                       | 8.3   |     | 1.4   | 2.5  | - 10.6   |
|      | All groups                                   | 100  | 35.2  | 51.0                      | 40.8  | ]   | 00  | 100  |  |

Source: Report of the Rural Banking Enquiry Committee, Ministry of Finance, New Delhi, 1950, p. 38.

<sup>19</sup> Asian Regional Conference, Nuwara Eliya, January 1950, Record of Proceedings, Geneva, 1951, p. 249.

<sup>&</sup>lt;sup>20</sup> Land Reform, United Nations document E/2003/Rev.1,

<sup>21</sup> Ibid., p. 51.
22 Ibid., p. 58.
23 From C. C. Liang, "Mobilization of Rural Savings with Special Reference to the Far East", International Monetary Fund, United Nations document E/CN.11/I&T/WP.1/L.5,

Legislation against usury exists in some form in nearly every country but it is frequently ineffective. The debtor is so dependent on the moneylender or the landlord (often the same person) that it would be quite impossible for him to seek legal redress.

Many people in these areas live in debt, die in debt, and their children inherit their debt. In the rural areas indebtedness may become a mechanism by which a peasant is reduced to a tenant and a tenant sometimes reduced to practically a serf.24 Moreover, elimination of creditors or credit may give only temporary relief. A study of rural indebtedness in Punjab, Pakistan, for instance, shows that 36 per cent of the families surveyed were again in debt (mostly to friends and relatives) in the first quarter of 1950, 2½ years after the mass exit of Indian moneylenders.25 A greater proportion of the debt was incurred for unproductive purposes, such as domestic expenditures, marriages, death dinner and funeral expenses. Only 1.3 per cent was for agricultural improvement and 21.2 per cent for the purchase of cattle. These facts point to the recurrent nature of the problem. Aside from the fundamental need for higher and more secure income, a change in the cultural pattern also suggests itself. The above situation is probably true for most parts of Southeast Asia. Government subsidies to rural credit and promotion of co-operatives have been recognized as remedies in most of these countries. Their effectiveness has, however, been limited where income is very low, owing to the difficulties of mobilizing resources (either by the government or by the co-operatives) in relation to the need.

### Plantation labour

Between the areas of agricultural and industrial employment in South and Southeast Asia there extends the large area of estate cultivation. It is a form of enterprise that applies certain techniques of mass production. (While in the more developed countries of Europe, North America and Oceania, wage and salary earners constitute the great majority of the people employed in industry but not in agriculture, in South and Southeast Asia the picture has been rather different-most industries are small but there are many agricultural employees on large estates and plantations.) Estate cultivation employs millions of workers drawn from communities in every stage of cultural development. The greater part of the population of Malaya has been brought there by the rubber growers from areas in China, India and Java, where the arts of husbandry were highly developed. In contrast, the tea gardens of Assam draw their labour largely from aboriginal populations whose agricultural methods are much less refined. (About one-half of the total aboriginal population of Assam and neighbouring states is thus employed for part of the year.)

Labour conditions on plantations have greatly improved in recent times. However, in spite of better

24 Thus a policy creating a class of small peasants without at the same time solving their fundamental problems of low

income and insecurity often proves to be ephemeral.

25 Report on the Need and Supply of Credit in the Rural
Areas of Punjab, the Board of Economic Inquiry, Punjab,
Pakistan, 1951, p. 5.

food, better housing, medical care, and many amenities formerly unheard-of, unfortunate practices that grew up in the past still have vestiges in contemporary labour management. Child labour is still employed. Women are still sometimes obliged to perform unsuitable and unhealthy tasks. Forms of discipline have been retained in some instances that are contrary to human dignity and contrary to modern ideas of efficient—and profitable—labour management. The origin of the plantation system in slavery<sup>26</sup> looms as a shadow over the region's labour relations.

The recruitment of labour for the tea gardens in Assam is governed by an Emigrant Labour Act of 1932 that has since been amended. Prior to this, the deception and corruption practised by the recruiting agents was notorious, as was the suffering of the recruits, both individuals and families, in transit and after arrival. While aboriginal labour still predominates in this industry, its welfare is now protected by government agencies. Machinery has been created for strictly voluntary enlistment of workers on the basis of correct information on the conditions of service; reasonable arrangements for transportation; the labourer's right to repatriation after three years of service or in the case of sickness, at his employer's expense; his right to suitable employment during the whole contract period, and his right to his full wages.

These are today standard conditions of plantation employment throughout the region. Employers have always favoured the use of foremen and workers as labour recruiting agents in their home districts, because the small commission they receive from the employer, if any, (in addition to that which they are permitted to deduct from the labour recruits' wages), costs very little. But even under good general supervision and with direct payment of wages to each worker this system is often contrary to the worker's welfare. Under it the contract worker still is dependent upon the man who has hired him and who, alone of management personnel, may speak his dialect and know his home conditions. The labour agent thus may have undue power over the worker and, in addition to his rightful commission, extort additional payments and services. This is a common experience in many parts of the region and a reason why most of the governments would prefer the substitution of a public employment exchange system for private recruiting by employers. But it takes resources and administrative experience to set up so complete a public apparatus. It is difficult in situations where labour must often be drawn from far places, where many of those who for the first time enter wage employment have no notion of what will be required of them, and where the temporary separation of a family or the removal from a community of many of its young men may have unfortunate social consequences. The question whether it would be wiser to transplant whole communities to the vicinity of major centres of employment has been raised; but many plantation managers now favour the recruitment of men accompanied by their

<sup>&</sup>lt;sup>26</sup> Plantation industries developed in South and Southeast Asia when slavery in the New World was suppressed, and for a long time followed practices resembling slavery in many respects.

families because it makes for social peace, contentment and a reduced labour turnover.

## Migrant labour

Apart from recruitment for employment on plantations, there are also other occasions for extensive labour migration. The density of population and the smallness of farms compel large numbers of peasants to seek employment away from their homes. The registration of job-seekers at city labour exchanges increases during the months of seasonal unemployment on the land. Severe unemployment in Colombo, in 1948 and 1949, was traced to a cessation of intensive wartime activity in the rural areas. India experienced increased migration to, and job-seeking in, the cities as a result partly of demobilization and partly of the influx of over 5 million people after partition. There is also a large seasonal movement between town and country, set into motion less by fluctuating employment opportunities in the former than by the unemployment of a landless rural proletariat.

As postwar projects of rehabilitation and development get under way, random migration has tended to become canalized and to form new regular currents of seasonal movements of workers. Asian workers do not as easily move their permanent residence from one place to another as do those of more fully developed regions when occupational opportunities shift from one locality to another. Migration, therefore, is likely for a long time to come to perplex the public authorities with its particular problems.

Supervision of migrant workers in transit is essential for the efficient control of epidemics. The Pasteur Institute of Indochina has demonstrated that unfitness of migrant workers for public works can be reduced by 20 per cent and more with the administration of simple preventive measures. In Malaya, health controls set up at immigration ports have long helped to reduce the morbidity rates among Chinese and Tamil workers; but internal migration still has its dangers to the public health.

Considerations not only of health but also of the destitution into which migrant workers are liable to fall have led to legislation and administrative provision for these matters in several countries of the region.

### Child labour

Both in agriculture and in industry, it takes time to overcome the old-established practice of considering the whole family as the unit of breadwinning activity. This practice is in keeping with the family-centred tradition of self-sufficient communities where the welfare of the individual is bound up with that of the whole society, and where mutual claims and responsibilities in the community are not very different from those within the family itself. The child in such a society is amply protected from exploitation for another's gain. But with the impact of the money economy, Asian society has become more individualized, and the employment of children both inside and outside their homes can be used by outsiders for their own ends without regard to the children's welfare. A device of the unscrupulous small employer is that of forcing a debtor to hand over one of his children to serve in the creditor's home, on his farm, or in his shop, without pay. "Apprenticeship", in some small urban industries of the region, is a euphemism for child slavery. Since with the high interest rates in vogue the debt may never be fully paid, the child sometimes remains all his life the servant of the creditor. Arrangements of this sort are now illegal in most parts of the region; but the concept that the payment of a father's debts is a sacred duty of his sons, even if it costs them their freedom, still prevails widely, and the labour inspectorate is not everywhere strong enough to prevent such practices.

Nearly every country of the region has enacted child labour legislation of one kind or another. But the old habits are difficult to break. Owners of shops and small factories still live in the mental atmosphere of pre-industrial society and, accustomed to seeing children help their parents in their village homes, find nothing wrong in setting them to work on more arduous and dangerous tasks in mills and factories. Where measures for the protection of child and juvenile workers have been effective, it has been primarily in the larger industries and at urban centres.

### Industrial labour

It will be clear from what has gone before that South and Southeast Asia suffers many difficulties and obstacles in the way of improvement of its labour conditions. The same could be said of any other region that has but recently come within the orbit of the money economy, but it is especially true of a region that teems with underemployed manpower and is held back in its development by poverty and ill health. In spite of these drawbacks, the region can show examples of courageous social innovations paralleling its technical achievements in particular localities and industries.

Being for the most part devoted to the manufacture of consumer goods, the industries of the region spring from the handicrafts and modest village shops of the pre-industrial era. It is to be noted, however, that this development differs in one essential point from that which in Europe took place at the beginning of the Industrial Revolution: there were no models to follow then, no methods to copy, no protective laws that could be extended and made to fit new situations. South and Southeast Asia, a region that suffers from being late in the world of industry, can nevertheless profit from experiences elsewhere.

No useful purpose would be served by illustrating here in any detail the unsatisfactory labour conditions that prevail in the region's urban centres of industry. They have often been described, and much has been done to improve them. That effort was arrested by the world economic depression (though this also gave rise to significant advances in some directions). It was brought to a virtual standstill by the exigencies of war and the conditions imposed by enemy occupation. Even to recover prewar standards has in some of the countries become a task of vast magnitude. International authorities have acknowledged the "substantial progress that has been made in the last few decades in the improvement of conditions of work in this region".<sup>27</sup>

<sup>27</sup> Asian Regional Conference, Nuwara Eliya, 1950, Report of Director General, International Labour Office, Geneva, p. 92.

But many plans and aspirations have not yet been fulfilled.

A special difficulty in South and Southeast Asia was and is that a very large part of the industrial activities is carried on in small units. The owners often have neither the means nor the knowledge required to bring their establishments up to reasonably satisfactory standards in matters that affect the worker's welfare. Moreover, many of these small employers are of foreign extraction, and employ a particularly defenceless class of people, the indigent immigrant. Many of the small employers, both indigenous and alien, have themselves risen from a humble position in society and, since they have achieved success by working hard and long, often in the face of adverse conditions, they fail to appreciate the need for modern standards in such matters as length of the working day and working week or the provision of facilities for physical and mental recreation. Where larger concerns possessed of ampler means and greater managerial knowledge, are in competition with these small factories, their labour policies are liable to represent a compromise. The prevailing low standards of labour efficiency and output may make them feel that they cannot afford to install the costly devices by which employers of labour in industrially more-advanced countries must satisfy the demands both of their labour force and of public opinion. The circumstances, then, are not propitious for a very rapid improvement in labour conditions, except for two factors: the growing self-consciousness of labour and the growing concern of the public authorities.

Recognition of the right of labour to organize for the purpose of collective bargaining is relatively recent in South and Southeast Asia and is not yet fully and firmly established. In most countries of the region, unions are legally subject to strict controls and registration procedures. The governments regard them as basic instruments in any serious effort to improve conditions of employment and have taken administrative action to encourage their growth. In practice, unions have until very recently been confined to a few industries.

The uneven development of labour organization has corresponded to the uneven development of other factors in the economic life. Over large parts of the region, the majority of wage-earners still are regarded, and still regard themselves, as servants and not as independent sellers of an essential contribution to production. The attitude of employers tends to be paternalistic, not only in the traditional local industries, such as sawmills and small village factories, but also in the larger modern enterprises. In the former, a personal relationship exists that expresses itself not only in overtime work without pay and in personal services but also in gifts and loans to employees; in the latter, embryonic organizations of labour resémbling company unions are often to be found. Trade unionism is also hampered by the continuing predominance of family and sectional loyalties in the minds of many labourers.

Since the Second World War, however, labour organizations have made substantial progress, although in a few cases, because of political schisms, the unions

have not maintained the peak strength reached in the immediate postwar years. Gains in membership, frequently impressive, are reported for most countries between 1947 and 1950: Burma (41,000 to 260,000), Ceylon (169,000 to 179,000), India (1,609,000 to 3,279,000), Pakistan (79,000 to 320,000) and the Philippines (33,000 to 370,000). In general, the stated membership at any given time is less important than the will to organization and collective action, which is spreading among more and more types of workers.

In general, the governments of South and Southeast Asia are taking the initiative in measures to correct unsatisfactory labour conditions. Some of them give priority in their budgets to the creation of administrative apparatus more adequate to that task than it has been before. All of them are taking a constructive part in the joint councils set up by various international and regional agencies, and especially by the ILO. One large group of recent enactments deals with the regulation of wages and wage payment. These cannot, of course, entirely overcome a chief obstacle to the improvement of working conditions: the extremely low productivity of labour and the low evaluation of labour that results from it. Much remains to be done to bring labour conditions in South and Southeast Asia up to modern standards, but the dynamic for that endeavour already

# Unemployment and underemployment

Like all countries having large sectors of their economy geared to the export of raw materials, the countries of South and Southeast Asia are under the constant threat of sudden and uncontrollable largescale unemployment. When world demand for a commercial product diminishes or collapses, as it did during the world economic depression and during the war, tens or hundreds of thousands of breadwinners are deprived of employment. It cannot be assumed that they will be smoothly absorbed by the communities of food-producing farmers from which they or their fathers have sprung. A sudden cessation in world demand for rubber or a political change like the partition of India—which separated the jute growers of Pakistan from their accustomed market-sends its distressing influence to an outer fringe of rural communities that have had no direct part in the production of the particular commodity in question. The growth of commercial agriculture in modern times has introduced a new element of insecurity even in sectors of Asian society that, to a greater or lesser extent, continue their inherited way of life. Under their established mores they must provide for the stricken families. The situation is worse, of course, if, in addition to returned migrant workers, many of the community's own members, normally engaged in producing for a market, are deprived of their means of livelihood, when the community as a whole has to some degree come to depend on income from the supply of distant markets.

Apart from such cataclysmic unemployment, there is, in every part of the region, cyclical and seasonal unemployment, and, furthermore, a very serious and widespread condition of underemployment. The facts are insufficiently known but it has been estimated that in the Philippines and in parts of India only one-half

or one-third of the work-days each year are productively utilized. There is chronic underemployment because the land and capital at the disposal of the small producers are inadequate to keep them fully employed; this partly accounts also for the extensive seasonal unemployment.<sup>28</sup>

Diversification of production is a recognized means of reducing underemployment and seasonal unemployment. Since it aims at a reduction in the labour reserve of the main forms of enterprise, it also tends to raise the price of labour, and, unless accompanied by increased efficiency, the price of the goods produced. Areas dominated by a monoculture or by a few large industries have been averse to anything that might lessen their competitive ability in the world market, while countries that consume the products or utilize them to feed their own industries have likewise not encouraged in the past changes that would increase the cost of living of their own workers or the cost of their raw materials.

In several of the countries extensive unemployment has been caused by recent political events. Pakistan, for example, has faced a peculiar twofold problem resulting from the partition. On the one hand, the tremendous influx of destitute Moslem refugees-originally some 7 millions—created the necessity of providing them as rapidly as possible with means of livelihood; on the other hand, the exodus of non-Moslems, especially from West Pakistan, adversely affected many kinds of economic activity, such as that of cotton-ginning mills, rice-husking mills and small factories, as well as banks and business houses, without which it is difficult for the productive enterprises to function. While in the rural districts additional manpower can usually be absorbed without difficulty, employment opportunities in the cities lag far behind the demand for jobs. Thus, in the second half of 1949, of 112,000 Pakistani registered at public employment exchanges, only 28,000 of them succeeded in finding work.

In India, the loss of public revenue resulting from the partition, as well as the disruption of certain trades and industries, has accentuated an unemployment problem that was of serious dimensions before. It slowed down expenditure on public works and the rate at which capital could be fed into new and greatly needed productive enterprises. Part of the difficulty is that, in spite of the existence of public employment exchanges, the demand for jobs remains in excess of the need for workers. In addition, there is technical unemployment, partly because of a surplus of specialized workers in certain branches of transportation, commerce and large industry, and partly because the village and cottage industries of the country have since the war been hit by new competition from more fully industrialized countries in search of Asian markets. India also suffers from the low standards of physical efficiency among its workers, already referred to. They keep down the man-hour output to a point at which low wages hardly compensate for low output in the labour cost.

The Burmese problem is reportedly threefold: chronic underemployment over the greater part of the rural

area; the loss of industrial work opportunities through the destruction by war and strife of plants and plant equipment; and the withdrawal of foreign capital since Burma's separation from the British Commonwealth. The last-named affects more especially some thousands of workers in oil fields, mines, cement works and other large plants. Locally-owned industries also have suffered from recent events. For example, most of the sawmills of Rangoon had to close for lack of lumber, the supply of which was held up by disruption of traffic on the waterways.

The Philippine Government speaks of "frictional" unemployment as a special problem: it is a condition which is aggravated when the demand for labour and the demand for jobs do not meet. This is a symptom of a society where labour, even though unskilled, already is somewhat specialized. Destruction of factories during the war was all the more distressing in its social effects for this reason.

In Ceylon there is apparently a great deal of seasonal unemployment; and it appears from reports of this Government that a large part of the population is permanently underemployed. Relief of unemployment here is attempted in general by introducing broad measures to strengthen the economy, and in particular by building up the productivity of labour, by encouraging co-operative enterprise (especially in the manufacture and distribution of consumer goods) and by increasing the purchasing power of the people through the combating of usury.

One paragraph in India's reply to the "full employment" inquiry<sup>29</sup> states a condition that obtains in a large part of the whole region of South and Southeast Asia:

"... the primary nature of the employment problem in this country is the existence of a chronic state of underemployment of the available man-power. This phenomenon appears in the form of disguised unemployment in agriculture and industry (a high proportion of which is still in the handicraft or cottage stage) with the resultant low productivity of labour and depressed standards of living. The elimination of 'structural unemployment', disguised or, in some instances, visible, by adequate economic development continues, therefore, to be the main desideratum".

Such economic development, the report adds, involves relief of population pressure, a proper balance between agriculture and industry, modernization of agriculture, and mobilization of national and international financial and technical resources.

It is sometimes said that the growing density of population in large parts of the region and the chronic underemployment of the villagers make for the absence of ambition. More and more people are set to work on smaller and smaller resources; there is an excess of manpower for the work to be done. The increasing manpower lowers efficiency; there is little incentive to economize human effort through labour-saving devices.<sup>30</sup>

<sup>&</sup>lt;sup>28</sup> The general situation, and its causes and effects, are set forth in the report of the International Labour Office, *Action against Unemployment*, *Geneva*, 1950, chap. VII, pp. 127 ff.

<sup>&</sup>lt;sup>29</sup> United Nations document E/1698/Add.1, pp. 16-17. <sup>30</sup> For a revealing discussion of this sequence see ILO, Underemployment in Asia—Its Causes and Remedies, Asian Advisory Committee, Third Session, Geneva, November 1951, pp. 27 ff.

All the governments of South and Southeast Asia, in one way or another, to one degree or another, are trying to break this vicious circle, by reforms that strengthen the farmer's and the wage-earner's economic position, and by the increase of literacy and education.

#### SECURITY AND DESTITUTION

Because of lack of data, it is difficult to compare the living standards of the population groups engaged in subsistence farming and in production for a nearby market with those of groups which have fully entered the money economy. But the less-advanced groups do enjoy a boon that is rapidly being lost by those drawn into the realm of modern commerce and into the fringe of modern life. They enjoy the security of strongly organized communities. These do not readily permit the individual to sink into helplessness and despair. No matter how serious his misfortune, unless he has offended against the customary law and is expelled from decent society, he is upheld by the tradition of mutual aid. The family still is the social unit. Popular opinion does not yet fully recognize civil and penal statutes that make the individual alone responsible for his actions. Beyond the family loom the clan, the caste, the community. The granaries to be found in many villages of the region serve the common needs of the local society, though they rarely suffice to make up for a serious crop failure. The effectiveness of mutual aid as the principal reliance of people when in trouble varies, of course, with the cultural history and social experience of the different societies.

However, the situation has somewhat changed in recent times with the rapid growth of commercial agriculture, with the withdrawal of large numbers of villagers from the traditional round of activities, and with the growth of population. Production for distant markets, and with it subjection to world fluctuations in demand and price, has introduced a new element of chance, different in its character and effects from the familiar unpredictability of nature. New marginal classes of destitute have sprung up, for whose sustenance the modern economy fails to provide. Provision for the relief of destitution has not yet, in South and Southeast Asia, reached a stage of organization and implementation that would justify use of the term "social insurance". But important beginnings have been made, programmes for future development have been adopted, and the machinery for the relief of exceptional distress—such as that occasioned by a crop failure, by war, or by banditry—has been established. Most of the decrees and laws have come into being in answer to major or minor crises that threatened to provoke unrest and crime, or in other ways to injure the stability of the State. And these crises, except in the Philippines, have more often arisen in urban than in rural areas. As a result, one finds most of the highly developed measures for social welfare concerned with the large cities, or else so circumscribed that in effect they apply only to urban labour and to the personnel of key economic enterprises.

The transition from the older to the newer ways of life has created grave social problems. The loosening of family and community bonds appears to have produced an increase in juvenile delinquency, particularly in the cities of the region, where its social causes can be traced to overcrowding and to the temporary replacement of war-destroyed housing with barracks, hutments, refugee camps and other makeshifts. Hardly any of the cities in the region have open spaces adequate to provide healthful exercise for young people; none have well-equipped and properly supervised playgrounds for younger children in poor neighbourhoods. Urban growth has been unplanned, as a rule, and has produced breeding grounds for every kind of crime.

Vagrancy of children and minors has resulted from the general tendencies already noted; and few of the countries in the region are yet equipped to deal with it, either remedially or preventively. Not only are facilities usually lacking for a suitable separation of different classes of offenders, but there is also a great lack of trained personnel. Juvenile offenders are often sentenced to internment in orphanages and other homes for destitute children, with the result that the dividing line between institutional care and punishment is obscured.

In South and Southeast Asia the problem of handicapped and infirm people who cannot support themselves in a normal way has likewise been aggravated by the growth of the money economy, urbanization and the substitution of wage-earning occupations for subsistence farming. There are vast numbers of persons disabled by disease and malnutrition, many of them without the customary claims on family or village. Their presence is evident in the cities, least noticeable in the least developed communities. In the urban districts many go on the streets and beg. In the villages there is some mendicancy, too, but more often that of professionals-members of itinerant groups that have attracted to themselves all manner of homeless folk. In times of crop failure, of course, mendicancy grows enormously, in the countryside and in the towns alike.

It must be realized that, in general, the social assistance provided through the family or local community is necessarily of a rudimentary nature (from a material and technical point of view), limited by the resources, skills and knowledge available to the villagers. Furthermore, poverty may be so widespread and intense that the traditional mutual aid and ready charity of village people often do not suffice to maintain the local blind and the lame, those afflicted with incurable diseases, and the old.

A recent report of the International Labour Office on its activities in Asia and the Far East<sup>31</sup> mentions the shortage of resources and practical facilities for public care of destitute groups in the region, and recommends a number of steps designed to make as large as possible a number of disabled people self-supporting (any other way of taking care of them is economically impracticable). All the governments of the region here under review do have legislative and administrative provision for the relief of disabled persons; but the provision is usually neither large enough nor sufficiently differentiated to meet the varied needs of handicapped persons. Professional knowledge of the best methods of rehabilitating the handicapped is as yet little diffused through the less-developed areas.

<sup>&</sup>lt;sup>31</sup> Economic Commission for Asia and the Far East, Seventh Session, Lahore, Pakistan, 28 February 1951.

Governments of South and Southeast Asia, concerned with the many disabled and mendicant, face a fundamental problem regarding the extent to which their limited facilities and financial resources should be devoted to the relief of the destitute, who represent but a fringe of a vast population that is always on the edge of destitution, and the extent to which these facilities and resources should be devoted to preventive health measures and measures for raising general standards of living.

### Natural calamities and war

A major source of insecurity and destitution that has had wide repercussions in the area has been the periodic occurrence of severe natural disasters. Where individuals are technologically unprepared to protect themselves against floods, droughts, insect pests, storms, earthquakes, epidemics and other natural misfortunes, they are apt to react to these occurrences with fatalistic acceptance. Governments in South and Southeast Asia, concerned as they are both in continuing production and in social welfare, have often found themselves handicapped in their effort at rehabilitation after a natural disaster by the seeming indifference of the affected communities. Traditions of self-help and of mutual help may suffice to mend the fortunes of individual sufferers, but little may be done to mend the broken dam or to build a new one.

In 1948, the Ganges flooded 1,410,000 hectares of farm land, destroyed 4,000 villages, and made over 4 million persons homeless in the Uttar Pradesh. In the same year, the Indus destroyed 184,000 hectares under crops and damaged or ruined 3,500 villages in West Pakistan. All the major rivers of Burma and Indochina, passing through gorges many miles in length, are liable to send huge waves roaring down to the plains, and to convert vast expanses of fertile farm land into lakes. At a recent conference of experts on flood control in Asia it was recognized that prevention of such disasters is linked up with the economic development of the areas where floods are liable to occur.

The Governments of Burma, Cambodia, Ceylon, India, Pakistan and Vietnam, among others, are studying protective devices in relation to the development of hydroelectric power and, with the assistance of foreign experts, are formulating multipurpose projects to remove the menace of destructive floods.

In Ceylon, as in India and Pakistan, devastating droughts also have occurred in recent times. A general crop failure from drought in 1947 produced widespread distress which was augmented when later in the year many of the districts affected were prevented by floods from taking advantage of the growing season. In that one fiscal year alone, the Government of Ceylon had to spend more than 11 million rupees for the relief of drought sufferers and a little under 2 million rupees for that of flood sufferers.

The Second World War also had disastrous consequences for the region. Its effect, as well as that of enemy occupation and of postwar civil disturbances, where these took place, have been felt in many phases of the life of the people. The per capita national incomes of most countries of the region, as noted above, were seriously reduced, the Burmese by 48 per cent. No

comprehensive study has been made to show the havoc wrought in fields of no less urgent social concern: the disruption of social patterns by the removal of large numbers of young men through recruitment for labour services; the interruption of habits of regular work by years of guerrilla warfare and by temporary abandonment of settled communities for the relative safety of the hills; and the later problem of assimilating thousands of young men whose adult experiences were limited chiefly to participation in resistance and guer-rilla movements.<sup>32</sup> The setback to education from the closing and destruction of schools, and later the retarding effect on school teaching of the loss of books and teaching equipment, can also be counted among the more serious social consequences of the war. In the Philippines nearly 7,000 schools were totally destroyed and about the same number partially wrecked. Higher education, in the Philippines and in Malaya, came to a virtual standstill with the closing and destruction of secondary schools and colleges, the looting of libraries and laboratories, the interruption of research and the loss of records. In Burma, almost one-third of the school buildings in urban areas were destroyed or damaged beyond repair. The loss of the university has been estimated at \$US2 million.

However, the Second World War also had a jolting effect upon the minds of the peoples of South and Southeast Asia. Peasant populations that had taken little interest in the outside world were deeply and directly affected, and began to concern themselves with problems in world relations that had had little meaning for them before. Even those who saw little of the war itself felt its impact through sudden demands on their labour, through food rationing, through lack of familiar commodities on the local market and through the rise of prices. This experience helps to explain the unanticipated growth of political consciousness in many parts of South and Southeast Asia.

The political independence movements, in turn, have served as major forces of social change and have converted much of the prevailing unrest into positive aspirations.

### Conclusion

Since the war the process of economic and social transformation of at least a large part of the region has become increasingly apparent, though change is at different paces and in different forms in the different countries. New forces of the spirit have been released by increased mobility and communication among millions of people. Far-reaching economic and social reforms took place before the war in nearly all the countries of the region; but a greater awareness of world standards has, during and since the war, sharpened popular discontent with a poverty rarely challenged before, and with limitations on freedom previously accepted as inevitable. As possibilities of action have widened, one hears rather less today of "fatalism".

Change has become more rapid both in the realm of economic relations and in that of culture, often with

<sup>&</sup>lt;sup>32</sup> The latter problem was reported by a United Nations Mission to Indonesia in 1950 to be of critical importance in that country.

unpredictable turns. Measures taken to increase production, to raise living standards, or to shift authority from hereditary right to the right of competency, may at any point be diverted from their purpose by some conflicting trend unwittingly set in motion. The tremendous task of making life in such a region more secure and prosperous is beset with difficulties that spring from the growing instability of many old institutions, customs and attitudes. Parts of the social structure still stand firm while others are crumbling. One element in the situation, noted by many observers, is a shift in authority and prestige away from older symbols of leadership and rule.

In the local community, hereditary factors still are strong in determining the status of families and individuals, but that status is increasingly challenged by newly-established wealth and by education. In the family, the authority of the elders—who traditionally decided what plot of land should be sold, bought, leased, or rented, who should marry whom and what dowry should be offered, how the work was to be assigned to the members of the family, etc.—is increasingly opposed by the judgment of younger men. As a result, while the old forms of etiquette—the deference shown to the aged and to privileged status—continue everywhere, they are often hollow, and the real decisions are often made by those with the largest stake in, and greatest knowledge of, the matter at issue.

In a society as yet only on the threshold of popular education, those who have had a little schooling enjoy a distinct advantage over those who have not; and those who are fully literate or have had even a modicum of secondary education exert considerable influence on public opinion. One of the strongest forces for further change, apparent almost everywhere in the region, is the influence exercised by teachers, local officials and professional personnel trained in modern schools, because such persons can mediate between the representatives of the government and the local people. It is for this reason that in their plans for social reforms so many of the governments of the region lay stress on the necessity of having resident in each district and in all of the larger communities persons familiar with local conditions who also are well enough educated to understand and interpret the wishes of the central authorities. Numerous reports express the view that new programmes of sanitation, improvement of farming methods and co-operative enterprises of all sorts<sup>33</sup>

succeed to the extent to which such projects avail themselves of the services of local residents who are trusted by the villagers and who are able to understand the meaning of, and the reasons for, the particular actions urged on the community.

It would be foolish to minimize the tremendous obstacles — economic, social and psychological — that stand in the way of social development in South and Southeast Asia. It would also be unwise to assume that the pattern of development will necessarily—or desirably—be the one followed by the West. Indeed, the situation is quite different if only for the reason that Western development has already taken place and the present end-products of this development are clearly evident. Improvements—in sanitation, education, communications, labour policy, social services, etc.—that developed in a slow and more or less experimental fashion in Western countries, are being deliberately taken over in their end-form in South and Southeast Asia, while there is at the same time a conscious effort to avoid the mistakes (such instrumentalities as modern labour unions and co-operatives, which evolved often in opposition to governments in the West, are being encouraged and pushed from above by governments in South and Southeast Asia). But the very fact that the latest form, rather than an earlier evolutionary form, is taken over reveals why the pattern, and consequently the problems, of development have special characteristics.

In some cases, it may not be too difficult to take over a modern technique, skipping intervening stages of development—for example, to use the airplane to cross mountainous areas that have no roads or railroads, to employ penicillin as the next step after folk remedies, or to bring the radio into villages that have never known telephones or newspapers. But in other cases, new techniques can be adopted only as the necessary base in social and economic structure, attitude, education, etc., is established.

In general, as noted at the beginning of this chapter, South and Southeast Asia has largely lacked an indigenous middle class, particularly of professional and technical personnel, as well as of entrepreneurs with capital, ready to take risks and to support innovations. Such groups provided much of the initiative and primary dynamic for development in Western society. Their absence in South and Southeast Asia has placed a relatively greater responsibility upon government, which must supply much of the initiative for economic and social modernization. Government, however, cannot itself supply technical skills that a country lacks. It is for this reason that international programmes of technical assistance may have critical importance. The problem of lack of supply of development capital has remained one of the most difficult obstacles.

International co-operation may be a means of solving problems that appear insoluble when viewed within the frame of national resources; and thereby the vast gap between the more-developed and the less-developed countries may be reduced. Many pioneer projects and demonstrations are under way in South and Southeast Asia based upon this faith.

<sup>33</sup> The importance which the governments of the region attach to the co-operation movement as an instrument of social progress was revealed by the reports and discussions of the Asian Technical Conference on Co-operatives held under the auspices of the International Labour Organisation at Karachi in December 1950. Since this movement is more concerned with economies in production and distribution than with consumer economics and planes of living, that discussion for the most part falls outside the scope of this chapter. It should be noted, however, that a large-scale distribution of consumer goods through co-operative societies has been resorted to, especially by the Government of Ceylon, to meet shortages after the war. Special mention should also be made of "multi-purpose co-operatives", "better living societies", "rural development societies" and like instruments which serve in various parts of the region as means of promoting total socio-economic change, on the theory that the community must progress as an organic whole.





